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ABSTRACT

The report describes the second year of a survey of sensory impaired children in Nebraska. It is explained that results have been used to improve administrative planning and cost efficient delivery of services. Demographic and assessment information was collected and analyzed on 888 sensory impaired children (birth to 21) via questionnaires completed by local education agencies. Assessment information was compiled from scores on the Stanford Achievement Test for Hearing Impaired Students (SAT-HI). The data from the survey are discussed according to three topic areas: highlights of the 1981-82 characteristics of the population (including a breakdown into hearing impairment only, visual handicap only, and both types of handicaps); a comparison of student data from two sources (local education agencies and special schools for deaf); and an analysis of visually handicapped children with regard to Nebraska's American Printing House Registration. A final section reviews uses of the data management system (including generation of individual student profiles), and conclusions and recommendations for increased effectiveness of the statewide survey. Extensive appendixes include distribution statistics. (CL)

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1981-82 FINAL REPORT

NEBRASKA SURVEY OF SENSORY IMPAIRED CHILDREN AND YOUTH

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August 1982

CENTER FOR ASSESSMENT AND DEMOGRAPHIC STUDIES
RESEARCH INSTITUTE
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1981-82 FINAL REPORT
NEBRASKA SURVEY OF SENSORY IMPAIRED CHILDREN AND YOUTH

INTRODUCTION

The second year of the survey of Sensory Impaired Children and Youth was conducted during the 1981-82 academic year. This survey and resulting data management system were first established in 1980 to aid those responsible for educating hearing impaired and visually handicapped children in Nebraska. The initial purpose of the undertaking was to provide comprehensive information on Nebraska's sensory impaired population in order to know the actual number and location of such handicapped children in the state and the characteristics which impact on their educational needs. With such information, improved administrative planning and more cost efficient delivery of services could be achieved (Rawlings, 1981).

This project was undertaken by Nebraska Department of Education (NDE) and the Center for Assessment and Demographic Studies (CADS), which is part of the Gallaudet College Research Institute, Washington, D.C.

During the second year of the project, demographic and assessment information was collected on 888 sensory impaired children in the state; already these data have been utilized by program planners, teachers, diagnosticians and other professionals whose responsibility is the provision of appropriate educational services to these children.

The purpose of this report is to describe the methodology used in collecting the information, to summarize the activities which were undertaken by CADS and the NDE staff, and to highlight some of the findings of the 1981-82 school year project. Also presented will be a review of the various project reports and some of the applications of the data base for program planning.

METHODOLOGY

Information was sought on all children and youth from birth to age 21 who had a sensory impairment and whose family residence was within Nebraska. The term "sensory impairment" was defined as "a hearing impairment and/or visual handicap which, even with best correction, adversely affects the individual's educational performance."

The information sought on these handicapped children included significant items relating to the provision of educational services. The major variables identified were:

-- child's demographic characteristics including name, residence, sex, birthdate, and race;

-- educational program descriptors;

-- hearing status;

-- vision status; and

-- other educationally significant handicaps.

The instrument used for data collection is found in Appendix 1.

The method used for identifying the sensory impaired population was to contact all Local Education Agencies (LEAs) within Nebraska and have them complete a questionnaire on each sensory impaired child residing within their jurisdiction. They were to report both those children served within the LEA and those who had been referred to other sites for service, such as the Nebraska School for the Visually Handicapped and the Nebraska School for the Deaf.

An initial survey form was mailed to all LEAs within the state to determine which agencies had sensory impaired children for whom they were responsible. (See Appendix 2.) All of the information was then processed onto a computerized data file so that it could be retrieved for analysis in various formats.

Confidentiality: In this as in all CADS projects, utmost attention was given to the protection of the confidentiality of its sources in all phases of data collection, analysis, and utilization. The procedures employed ensured that no information could be released that would permit identification of an individual student or program, except to authorized persons. The respondents were all notified of this underlying principle in correspondence, and a confidentiality statement appeared on each survey form. The CADS staff involved in the data processing have signed oaths of confidentiality, and, throughout the project, additional safeguards were used to limit access to the computerized data files to authorized individuals.

SUMMARY OF ACTIVITIES

The major activities associated with the survey are summarized below with reference to the five major objectives which were listed in the project proposal. Following this section is a schedule of when these activities were undertaken.

OBJECTIVE 1: To establish and maintain contact with appropriate LEAs as identified by the Special Education Branch at NDE to ascertain if the LEAs are serving sensory impaired children.

The computerized mailing list of LEAs which was established by CADS during the previous school year was reviewed by NDE staff who made the necessary additions and corrections. These revisions were then made on the CADS address file. The final mailing list consisted of superintendents at 423 LEAs who were contacted and asked to indicate if they had any sensory impaired children residing in their jurisdictions. Several follow-up mailings were undertaken for those who did not respond to the initial inquiry.

As the information was returned to CADS, the responses were tabluated and any changes in addresses or the LEA contact persons were made on the computerized list. Table 1 provides a summary of the information from this mailing to superintendents of the LEAs. Only 14% of the LEAs contacted did not respond while 86% returned information either indicating the estimated number of sensory impaired children or responding that they had no such children.

Throughout the year, contacts were maintained with the appropriate contact persons at the LEAs to provide them with information regarding survey activities. Included in these mailings was a Newsletter which highlighted the findings of the first year of the Nebraska Survey of Sensory Impaired Children and Youth and provided other useful information on activities at the special facilities for the handicapped in Nebraska and on professional meetings and workshops scheduled for those working with the sensory impaired (Appendix 3).

TABLE 1: NUMBER AND PERCENTAGE OF LOCAL EDUCATION AGENCIES RESPONDING TO INITIAL SURVEY OF CHILD COUNTS, 1981-82

	RESPONSES	
	NUMBER	PERCENT
TOTAL LEAs CONTACTED	423	100%
-- LEAs Responding	365	86%
Reporting Sensory Impaired Children	197	46%
Reporting No Sensory Impaired Children	168	40%
-- LEAs Not Responding	58	14%

OBJECTIVE 2: To collect information determined to be significant in the provision of services specific to hearing impaired and/or visually handicapped children and youth in Nebraska.

A survey instrument designed to collect the information needed by NDE for program planning was developed by CADS and NDE. These forms were then distributed to those LEAs who had previously indicated they had sensory impaired children. (A small number of LEAs had reported no such children, but, because NDE suspected that there might be sensory impaired children in these jurisdictions, additional contacts were made to these LEAs.)

Those LEAs that reported sensory impaired children were then sent a supply of individual child questionnaires to complete. Those LEAs which had participated in the project the previous year were sent pre-printed forms with the information previously supplied on their children already completed. These LEAs were simply asked to indicate if the children still resided within the LEA and, if so, to supply any new or missing information. They were also given blank forms to complete on any new students or students who had not been reported during 1980-81. Repeated follow-up contacts were made with the LEAs which did not respond to try to insure a high rate of participation.

The final tabulation of questionnaires showed 888 sensory impaired children reported from 175 LEAs (Appendix 4). There were 165 LEAs which reported no sensory impaired children, and 83 LEAs that did not respond at all to the various queries (Tables 2 and 3).

In order to gather academic assessment data on the hearing impaired children, CADS provided all necessary testing materials for the Stanford Achievement Test for Hearing Impaired Students (SAT-HI). This included the teacher administration materials and student screening tests, practice tests, and full test batteries. The scoring services were also provided which included machine scoring of the tests and computer-produced score reports. Explanatory materials for interpretation of the results were distributed with the score reports. A sample of the score report is found in Appendix 5.

In conjunction with the assessment component of the project, CADS personnel presented workshops on the administration of the SAT-HI and the appropriate use of the results. These workshops were held at 3 locations to provide the opportunity to reach the maximum number of teachers and diagnosticians in the state. The sites selected were Nebraska School for the Deaf, Lincoln Public Schools, and Omaha Public Schools. (In total, over 175 age-eligible hearing impaired children in Nebraska were tested with the SAT-HI.)

In relationship to the goal of gathering assessment information, CADS and NDE staff met with a representative of Boys Town Institute to exchange information on the collection of measures of academic assessment for visually handicapped children. The various instruments available and the techniques used with this sensory impaired group were reviewed.

TABLE 2: NUMBER AND PERCENTAGE OF LOCAL EDUCATION AGENCIES (LEA) SUBMITTING CHILD QUESTIONNAIRES, 1981-82

RESPONSE	Number	Percent
Total LEAs Contacted	423	100%
LEAs reporting sensory impaired children	175	41%
LEAs indicating NO sensory impaired children	165	39%
LEAs not responding*	83	20%

*This number is actually slightly higher: some LEAs did not respond but if they had students at NSD or NSVH the LEA was counted as a response.

TABLE 3: COMPARISON OF THE 1981-82 and 1980-81 SENSORY IMPAIRED COUNTS IN NEBRASKA

Sensory Impairment	1981-82 Number	1981-82 Percent	1980-81 Number	1980-81 Percent
TOTAL	888	100%	844	100%
Hearing Impaired Only	562	63%	546	65%
Visually Handicapped Only	254	29%	238	28%
Hearing & Visually Handicapped	54	6%	32	4%
Sensory Impaired but Type of Impairment Not Specified	18	2%	28	3%

OBJECTIVE 3: To process the data collected in computerized form for later analysis.

All of the information collected through the various surveys was processed utilizing Gallaudet College's Digital Equipment Corporation DEC-System 1080/KL-10 time-sharing computer. Most of the information on the forms was optically scanned using a Sentry 7001; data such as names and other "write-in" information which could not be processed in this manner were entered onto the computerized data base through CRT terminals utilizing key-to-disk processing. All the computer programs necessary for this data processing and analysis were developed by the CADS programming staff.

The machine scoring of the SAT-HI answer documents was done by the Psychological Corporation's Scoring Center. A magnetic tape of the results was then processed by CADS to produce the student score reports.

OBJECTIVE 4: To analyze periodically the data files once assembled.

CADS staff met with NDE personnel on several occasions to review the status of the data management system and the most appropriate ways for retrieval of information. During the current contract year, numerous tabulations were prepared for NDE for its planning purposes. The variety of reports and tabulations which were prepared are summarized in a later section. Where known, the anticipated use of the requested information is also shown.

OBJECTIVE 5: To disseminate the results of the data analysis to a wide variety of users within Nebraska as deemed appropriate by NDE.

During the contract year, additional copies of the Final Report of the 1980-81 Survey of Sensory Impaired Children and Youth were prepared for distribution by NDE. The Newsletter (mentioned above) was disseminated to all of the LEAs, and additional copies were made available for distribution at professional conferences.

During the presentation of the SAT-HI workshops, CADS staff devoted some time to the results of the survey and highlights of the findings. A workshop for staff of the Special Education Branch of NDE was also held to review the status of the project and possible uses of the survey data.

The findings of the Nebraska Survey have also been presented at several state and national meetings during the year. Reports by CADS staff have been made to the Conference of Educational Administrators Serving the Deaf and to the National Advisory Committee to the Annual Survey of Hearing Impaired Children and Youth. NDE staff have made presentations to the spring Meeting of the Nebraska Speech, Language, and Hearing Association and to the annual meeting of State Consultants for the Visually Handicapped.

SCHEDULE OF 1981-82 SURVEY ACTIVITIES*

1981

JULY
- Established computerized mailing list of 423 LEA contacts.

AUGUST
- Began development of survey form.

SEPTEMBER
- Met with NDE staff to review questionnaire and develop survey materials.

OCTOBER
- Printed Trans-Optic student questionnaires.
- Designed, wrote and printed Newsletter.
- Prepared covering letters for survey mailing.

NOVEMBER
- Sent materials for initial LEA survey to superintendents.
- Began data processing of responses as received.
- Revised mailing list as respondents indicated.

DECEMBER
- Sent follow-up mailings to non-respondents.
- Telephoned repondents when additional information was required.

1982

JANUARY
- Mailed announcements for SAT-HI workshops to appropriate LEA contacts.
- Began distribution of SAT-HI materials.
- Contacted all LEAs with sensory impaired children, distributing student questionnaires.
- Conducted SAT-HI workshops at 3 locations in Nebraska.
- Met with Nebraska School for the Deaf personnel on completing student questionnaires.
- Began processing student questionnaires as returned.

FEBRUARY
- Telephoned respondents requiring additional information on the survey.
- Distributed additional survey forms as requested.
- Completed computer programs for data processing.

MARCH
- Sent follow-up mailings to those not returning student questionnaires.
- Scored SAT-HI tests submitted.

APRIL
- Continued processing of student survey forms.
- Scored additional SAT-HI tests.

MAY
- Completed editing and optical scanning of student survey forms.

JUNE
- Met with representatives of BoysTown to discuss academic assessment of visually handicapped children.
- Conducted seminar for Special Education staff at NDE on data applications.
- Presented findings to Nebraska State Board of Education.

* Throughout the year, specific requests for tabulations of data were filled by CADS staff.

DISCUSSION OF THE DATA

The presentation of the data collected in the survey focuses on three areas. The first includes highlights of the 1981-82 characteristics of the population. Next is a comparison of the information submitted by two separate sources on students attending the Nebraska School for the Deaf. Finally, there is an analysis of the visually handicapped children with regard to Nebraska's American Printing House Registration.

Highlights of the 1981-82 Data

The 888 children for whom detailed information was collected can be grouped into three categories of sensory impairment: those with hearing impairments only, those with visual handicaps only, and those with both visual and hearing handicaps.

Table 4 outlines the major variables for which data were sought and shows the rate of non-response to these particular items. As has been found in other surveys, the rate of non-response is usually lower in ensuing years of such studies as the respondents are able to improve their record keeping and update their files. This was the case with the Nebraska Survey also. For the vast majority of items, the non-response rates were lower during the current year than they were last year.

Five hundred sixty two children were identified who have only a hearing impairment; 254, who have only a visual handicap; and 54, who have both types of handicaps. For 18 children, the type of sensory impairment was not specified. The number of

children reported in each of the three categories increased over the number reported last year. Figures 1, 2, and 3 display the geographic distribution of these sensory impaired children according to the location of their LEAs.

Below are some additional highlights of the data. The detailed tables from which these observations are taken appear in Appendix 6. Further analysis of the data may be found in the 1980-81 Final Report to the Nebraska Department of Education.

-- Three Educational Service Units each reported over 100 sensory impaired children:

   ESU 3 (Cass, Douglas Sarpy, & Washington Counties) had 105; ESU 18 (Lincoln School District) had 115; and ESU 19 (Omaha School district) had 257.

-- The largest percentage of visually handicapped children were in the group 6-9 years of age (26%) while the largest percentage of hearing impaired children (31%) were in the 14-17 age range. Twenty-five percent of the children with both hearing and visual handicaps were in the 3-5 age category. This is shown in Figure 4.

-- In all categories of handicaps, the males were predominant in number. The percentage of males among the hearing impaired only group was 54%; for the visually handicapped only, 64%; and for the group with both hearing and visual handicaps, 69%.

-- With reference to ethnic origins, the population was almost entirely white, although there were 49 black and 18 Hispanic children reported.

-- Hearing impaired children were more likely to be receiving some support services in the regular classroom settings if they were attending both regular and special education classes (72%) than if they were attending regular education classes on a full-time basis (44%).

-- For all the sensory impaired groups, about two-thirds were receiving speech and auditory training.

hearing and visual handicaps were more likely than children with a single sensory impairment to be receiving full-time special educational services.

	FULL-TIME SPECIAL ED.	FULL-TIME REGULAR ED.	SPECIAL & REGULAR ED.
Hearing & Visual Handicaps	67%	7%	13%
Hearing Impaired Only	40%	31%	24%
Visual Handicap only	34%	36%	23%

-- The majority of children with profound hearing loss were being served at the Nebraska School for the Deaf rather than in their LEAs (Figure 5).

-- Visually handicapped children were much more likely to be enrolled in a parent-child program (88% for children with visual handicaps only and 83% for children with both visual and heiraing handicaps) than the children with a hearing handicap only (7%).

-- Visually handicapped children had higher rates of additional handicaps (49% of children with visual handicaps only and 79% of the group with visual and hearing impairments) than did children with hearing impairments only (24%).

-- 20% of the children at the Nebraska School for lthe Deaf were reported to have an additional handicap as compared to 34% of the hearing impaired children being served in a Local Education Agency.

-- 60% of the students at the Nebraska School for the Visually Handicapped were reported to have an additional handicap. Of the visually impaired students being served in a Local Education Agency, 54% had additional handicapping conditions.

-- For all groups, the vast majority acquired their handicap at birth: 69% for the hearing impaired only, 90% for the visually handicapped only, and 87% for those with botn visual and hearing handicaps.

-- Nystagmus was the most frequently reported cause of vusial impairment (24%).

-- Of those children with a hearing impairment, 30% had losses in the mild range, and 29% had losses in the profound range.

TABLE 4: COMPARISONS OF NON-RESPONSES TO SELECTED QUESTIONNAIRE ITEMS ON THE NEBRASKA STATE SURVEY OF SENSORY IMPAIRED CHILDREN AND YOUTH, 1981-82 and 1980-81

ITEMS	Hearing Impaired Only		Visually Handicapped Only		Deaf-Blind	
	81-82 N=562	80-81 N=546	81-82 N=254	80-81 N=238	81-82 N= 54	80-81 N= 32
Sex	1%	1%	2%	2%	6%	9%
Age	2%	6%	2%	4%	4%	13%
Ethnic Background	1%	1%	1%	2%	0%	0%
Educational Program						
Special Education	2%	2%	3%	7%	4%	0%
Regular Education	3%	2%	4%	3%	9%	9%
Support Services	27%	4%	17%	4%	17%	6%
Auditory Training	3%	2%	6%	7%	6%	0%
Parent-Child Program	4%	4%	6%	5%	4%	0%
Additional Handicapping Conditions	2%	5%	1%	3%	2%	6%
Age at Onset of Hearing Loss	34%	40%	--	--	26%	34%
Cause of Hearing Loss	52%	54%	--	--	59%	63%
Year of Audiological Exam	13%	19%	--	--	39%	53%
Degree of Hearing Loss	2%	7%	--	--	13%	22%
Hearing Aid Use	2%	7%	--	--	6%	19%
Age at Onset of Visual Handicap	--	--	26%	20%	31%	22%
Cause of Visual Handicap	--	--	10%	13%	26%	41%
Visual Acuity Distance	--	--	40%	76%	65%	86%
Year of Visual Exam	--	--	13%	13%	28%	38%
Field of Vision						
Right	--	--	66%	70%	74%	84%
Left	--	--	67%	71%	74%	84%
Low Vision Exam	--	--	6%	13%	19%	44%

FIGURE 1

NEBRASKA LEA'S REPORTING CHILDREN WITH HEARING IMPAIRMENTS ONLY

1981 - 1982

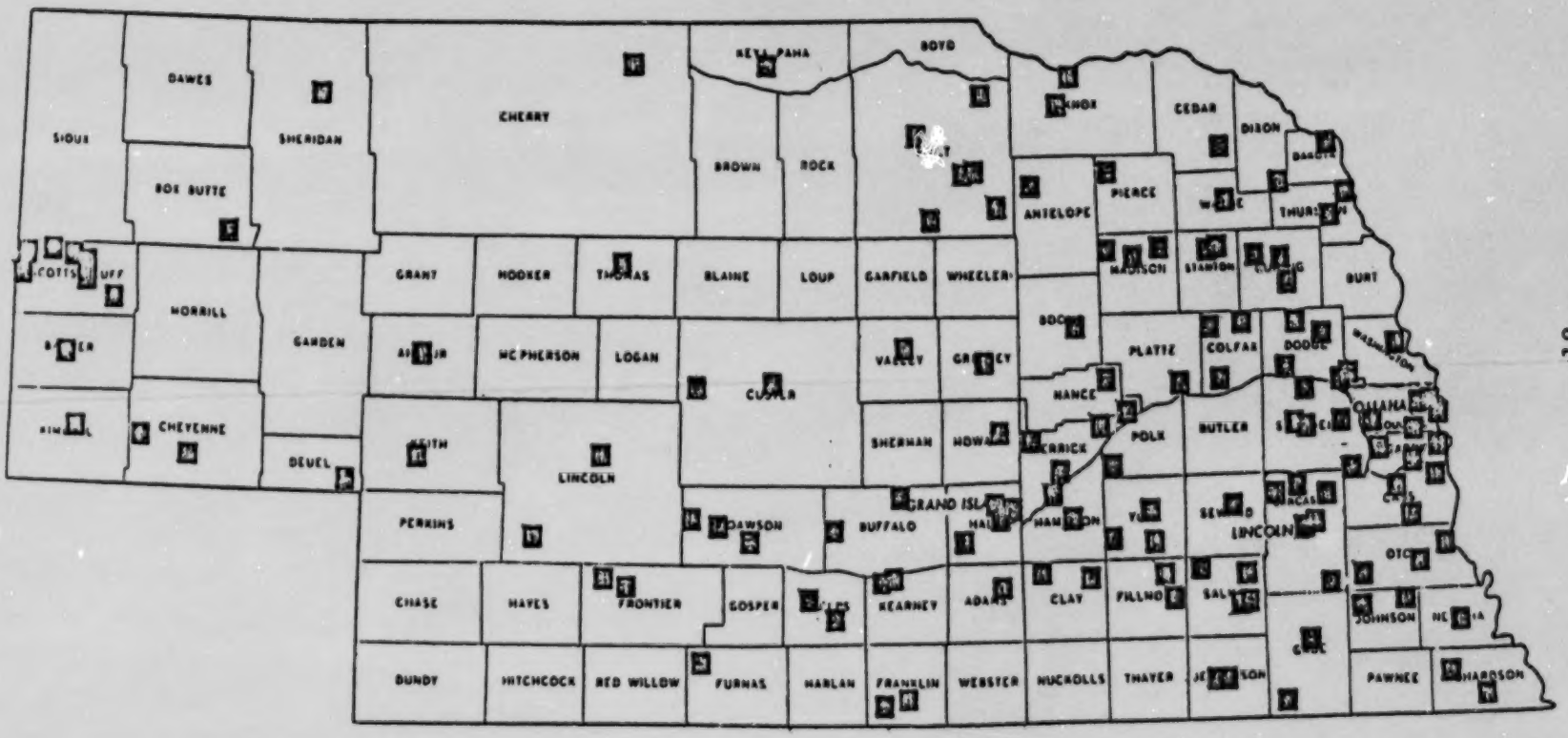


FIGURE 2

NEBRASKA LEA'S REPORTING CHILDREN WITH VISUAL HANDICAPS ONLY

1981 - 1982

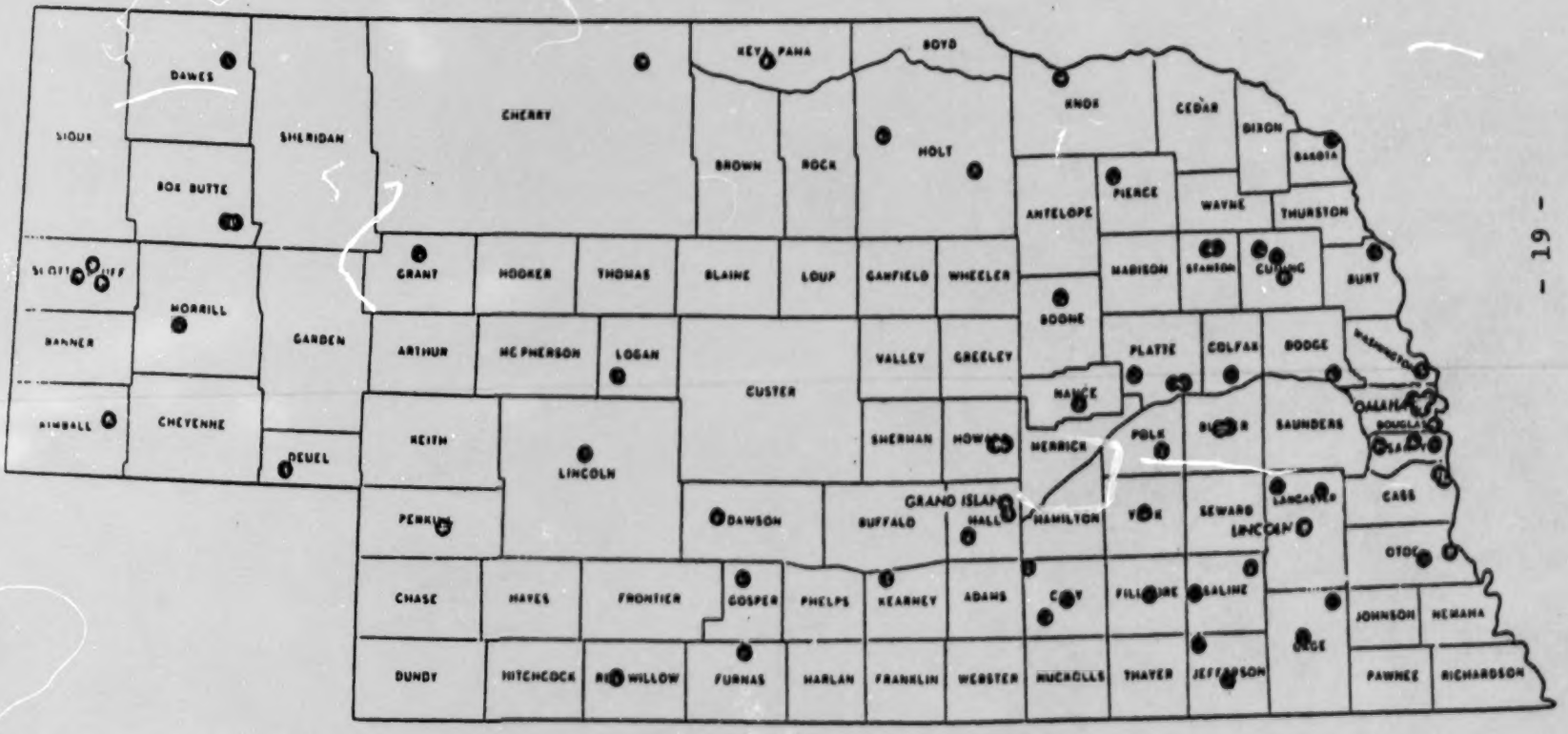


FIGURE 3

NEBRASKA LEA'S REPORTING CHILDREN WITH BOTH VISUAL AND HEARING HANDICAPS

1981 - 1982

Figure 4 : Percentage Distribution by Age of Sensory Impaired Children in Nebraska, 1981-82.

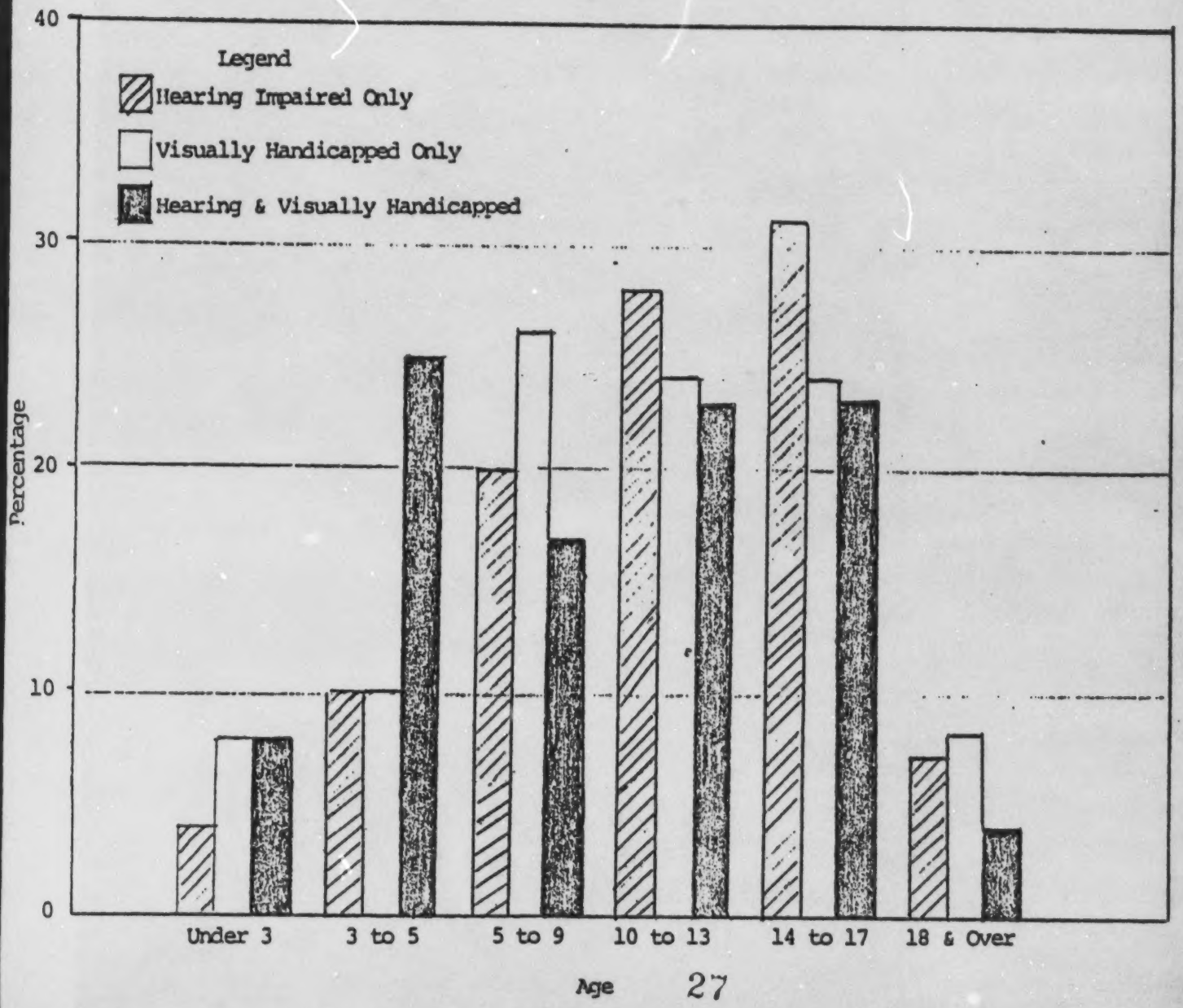
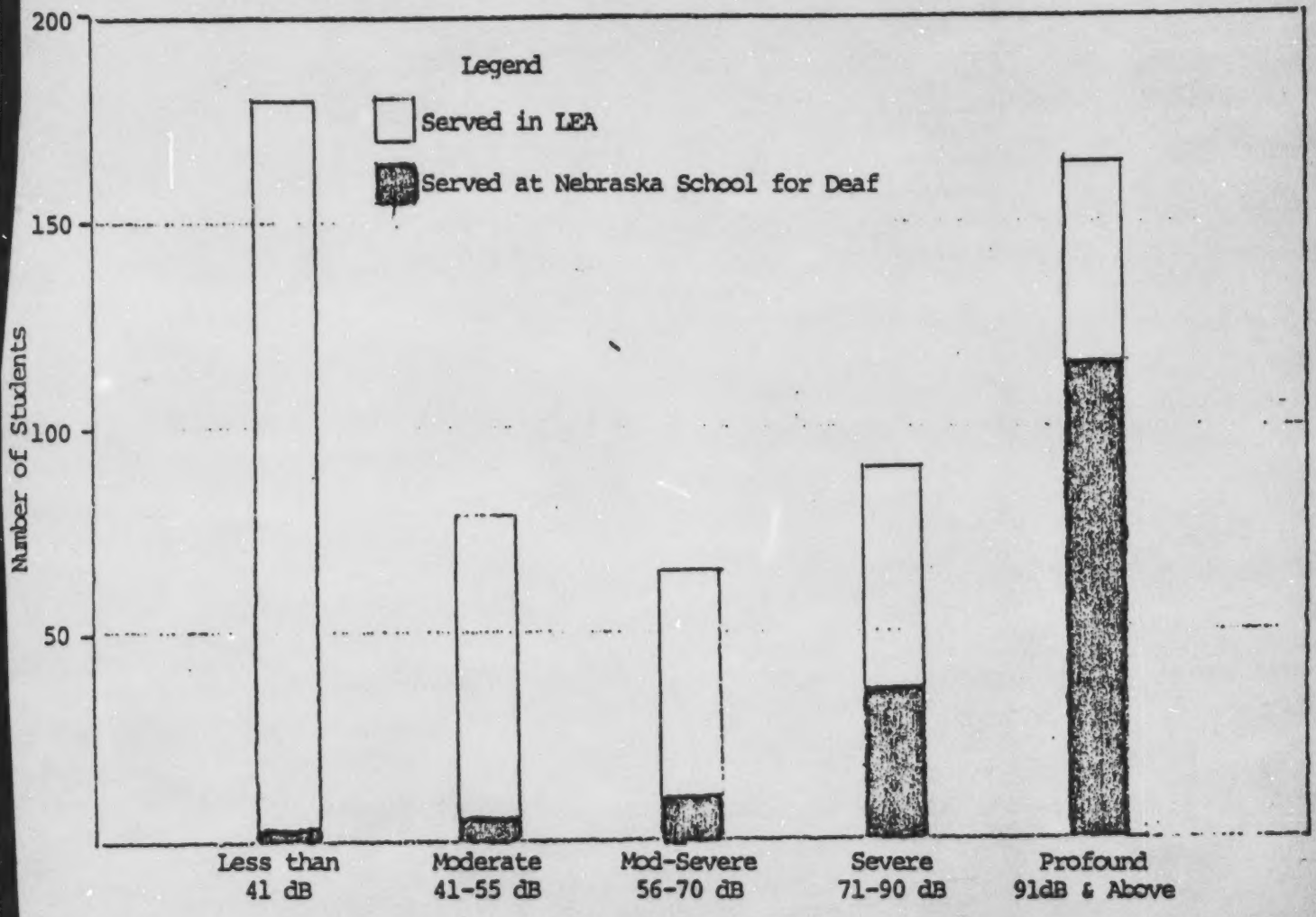


Figure 5: Distribution of All Children with a Hearing Impairment by Degree of Loss and Site of Service, 1981-82.



Comparison of Student Data from Two Sources

As previously mentioned, the student information is sought from the LEA which is responsible for the education of the sensory impaired child. In most cases, it is the LEA which is providing the service, but if the child has been referred to another site such as NSD or NSVH, then the LEA should still have the information for completing the student questionnaire. However, during the first year of the survey, it was found that many of the LEAs were not reporting children who were attending the special schools. In some cases, the LEAs had not understood clearly that they were to report these children. In other cases, the LEAs indicated their failure to report the children was due to the fact that the LEA files did not contain the detailed information requested.

Because of the small number of children at NSVH, personal follow-ups were made and all of that population were reported during the 1980-81 survey year. However, the large population at NSD and the number of LEAs involved presented some added problems in obtaining a total count for the school. In an effort to include all these children, NSD agreed last year to complete records on all their students. This double reporting was undertaken to ensure more complete coverage of those students at NSD and to permit analysis of the information known by the LEA as compared to that available at the actual site of service.

When the LEAs were contacted in Janaury, 1982, if they had a child attending NDS last year, a partially completed record was sent to them for updating and correction. (This was done regardless as to whether NSD or the LEA had aprovided the information in 1980-81.) The LEA was also asked to report any new children atttending a special school. Again this year, NSD provided information on all their students so that a comparison could be made between information submitted by NSD and that provided by the LEAs.

The student population attending NSD during the 1981-82 school year was 169. There were 47 LEAs, however, reporting a total of 79 children who were at the school. This meant that 90 children, or over 50% of the students, were not reported by the LEAs. These 90 children came from 31 LEAs (see Table 5).

TABLE 5: STUDENT RECORDS SUBMITTED BY LEAs ON NEBRASKA SCHOOL FOR THE DEAF STUDENT POPULATION, 1981-82.

INFORMATION SOURCE	STUDENTS		RESPONSIBLE LEAs	
	N	%	N	%
Information from NSD	169	100%	78	100%
Information from LEAs	79	47%	47[a]	60%
Missing information	90	53%	31	40%

[a]5 LEAs reported some children at NSD, but did not report all of the children known to be attending the school.

Several things may account for the missing 90 records. For example, it is known that 41 students came from one LEA which sent their records directly to the school for completion rather than attempting to complete the information themselves. This may have happened with some of the other LEAs as well. A few of the families of these children had changed residences during the year and the LEAs may not have known they were now responsible for a particular child at the time the survey forms were completed. In other cases, the LEA simply chose not to return a form for a child.

For the students with duplicate records submitted (i.e., one from the LEA and one from NSD), CADS carefully monitored the processing of the information to ensure that the final data file did not contain duplicate documentation for these students. Separate files were maintained, however, of the information to provide some comparisons of information maintained by NSD and that recorded by the responsible LEA. A detailed computer match for selected variables was completed by CADS.

For the 79 children with duplicate records, 74 were children who had been reported the previous year so all the LEA had to do was update the information regardless of whether they had supplied it the previous year or whether it had come from NSD. There were only 5 new children with records provided directly by the LEA.

For questions relating to educational services, both NSD and the LEAs had to supply all the information as this section was

new for each child. With reference to the question of whether the child received special education classroom services, there was 96% agreement on the forms. In general, the LEAs did know that the child at NSD was receiving special education classroom services. However, as to the type of classroom settings -- hearing impaired only, visually handicapped only, multiply handicapped, etc. --about 14% of the LEA records and NSD records did not match. For most of these, the LEA left the items blank.

Surprisingly, 11% of the records did not match on whether the student resided at school or lived at home. For five students, NSD reported the child lived at home while the LEA reported that the child lived at school; there were 2 children reported by NSD to reside at the school when the LEA reported the child to be living at home. One child was reported by NSD to be living at the school and the LEA left the item blank; for another child, NSD left the item blank while the LEA reported the child resided at the school.

There were only five mismatches on the item of enrollment in parent-child programs. In four of the cases, NSD reported the child was not in such a program and the LEA left the item blank. In the other case, NSD responded negatively but the LEA indicated the child was in such a program.

The largest number of mismatches related to whether the child was receiving speech and auditory training on a regular basis. For almost one-third of the students, NSD indicated the children were not getting these services while the LEA reported

that the children did get such training. For two children, NSD reported the services were provided but the LEA left the item blank; for one child, NSD indicated that the child did not get such service and the LEA left the item blank.

Only a few children at NSD are integrated in classes with non-hearing impaired children and, in most cases, the LEA knew this. There were only six mismatches. For five children, NSD reported no such service and the LEA either reported the child did attend classes with hearing children or left the item blank; in one case where NSD said the child was integrated with hearing students, the LEA reported that the child was not.

The table below shows the percentage of mismatches for other selected variables. The 79 records compared include the five new students and the 74 previously reported students. It must be remembered that for the 74 students, the information sent to the LEA and NSD was the same so the mismatches reflect alterations which were made by one of the respondents.

TABLE 6: NUMBER AND PERCENTAGE OF MISMATCHES FOR SELECTED VARIABLES

VARIABLES	NUMBER OF MISMATCHES	PERCENT
Cause of hearing loss	13	16%
Degree of hearing loss	18	23%
Age at onset of loss	16	20%
Additional handicapping conditions	7	9%

In summary, more than half (53%) of the students attending NSD were not reported by the LEAs responsible for them. In addition, where comparisons were possible between information reported by the LEA and NSD, agreement of responses ranged from 96% on the item relating to provision of special services to 66% on the item concerning enrollment in speech and auditory training program. These discrepancies need to be addressed in future work to increase the LEAs' awareness of the sensory impaired children for whom they are responsible.

American Printing House Registration of Legally Blind Pupils

In another attempt to verify the students being reported to the Survey, a comparison was made to the Nebraska APH Registration of Legally Blind Pupils. This independent count of legally blind children is conducted by the Nebraska Department of Education each January. A comparison of the names submitted to this registry was made with the students reported to the Survey of Sensory Impaired Children and Youth.

Of the 162 individuals on the APH Registration, 105 matched with names on the Sensory Impaired Survey. There are, then, a known 57 children who are visually handicapped who are not being reported to the Survey (Table 7). In attempting to analyze why these children are not being reported to the survey, it was found that almost half of them were being served at three facilities: the Beatrice Developmental Center, Bethage Mission, and Region IV OMR. The remaining students were served at various Local Education Agencies across the state.

TABLE 7: COMPARISON OF APH REGISTRATION OF LEGALLY BLIND PUPILS WITH NEBRASKA SURVEY OF SENSORY IMPAIRED, 1981-82

SOURCE	NUMBER	PERCENT
APH Registration	162	100%
Pupils on APH Registry and on Survey of Sensory Impaired	104	64%
Pupils on APH Registry list only	58	36%

As indicated earlier, there were a total of 308 children reported to the Survey of Sensory Impaired Children and Youth who had some type of visual handicap. Not all of these children had visual handicaps which were severe enough to have included them on the APH Registry. (The APH Registry of Blind Pupils includes children with corrected central visual acuity of 20/200 or less in the better eye or a peripheral field which is no greater than 20 degrees.)

In general, it appears that the visually handicapped children in the Nebraska Survey are under-represented and that attempts should be made to increase the coverage of this population.

SURVEY REPORTS AND USES

As with any data management system, its ultimate benefit and success can be measured by the various uses which are made of the system. The reports which have been generated as part of the project are designed to be useful to a variety of personnel ranging from those in the classroom to those with statewide planning responsibilities. Listed below are some of the specific reports and special tabulations which have been produced during the contract period.

1. Individual Student Profiles

   For each student reported to the Survey, an individual summary of the information submitted was prepared (Appendix 7). The student's identifying information (including name, home address, parents' names, and child's birthdate and sex) is shown; also indicated are the responsible Local Education Agency and the site of educational services. A summary of the educational services are noted and then followed by information on the child's hearing and/or visual handicap. These Individual Student Profiles were then distributed to the Nebraska Department of Education for their use in reviewing individual student cases. Each LEA will also receive an Individual Student Profile on each child they reported to the Survey; this summary format should be useful to them for updating their files and as an easy reference source of information.

2. SAT-HI Student Score Reports:

For those children who took the Stanford Achievement Tests for Hearing Impaired Students, an individual score analysis was returned to the child's educational program (Appendix 5). These score reports include student's name, school, birthdate, age at testing, the test date, and the test level taken. The main body of the report lists each of the subtests taken by the student and divides these subtests into the various item groupings which make up the subtest, e.g., math computation is broken down into "knowledge of primary facts," "addition and subtraction," "multiplication and division," "common fractions," and "other operational models." Thus, a teacher who wishes to learn how an individual student is doing, not just in math computation in general but in multiplication and division specifically, can go to that section of the score report for a breakdown of the student's achievement in that area.

Shown on the report are the total number of questions on the subtest and item groupings, the number the student answered correctly, the number answered incorrectly, the number left blank, and the percentage answered correctly.

A second set of columns pertained to the subtests only and not to the subgroupings within the subtests. These columns listed:

A. the scaled score, a special type of measurement result which permits analysis of a student's growth in a specific instructional area across battery levels and across years or different test administrations. Thus, if a teacher wishes to learn what kind of progress a student has made in math computation over a period of three years, an examination of the scaled score in this area over the yearly testing should be of great assistance in determining this progress or its lack. On the Stanford, a scaled score of 132 is defined as the performance of an average (hearing) student in the second month of the third grade, and 182 represents the average performance of the median (hearing) student in the second month of the eighth grade. Each scaled score unit on the Stanford thus represents one theoretical academic month.

B. the grade equivalent score, which is a comparison of the student's score results on a particular subtest with hearing children who took the same level of the test. Although this grade equivalent score is familiar to most teachers and administrators, it should be used with great caution in regard to hearing impaired youngsters since it reflects a comparison not based on age but on test level taken.

C. the hearing impaired percentile rank, a comparison of the student's score results with hearing impaired students of the same age who took part in the national achievement test standardization program in 1974.

3. Statewide Summary of All Sensory Impaired Children:

A 111-page computer tabulation of all information submitted on the 888 sensory impaired children in Nebraska was prepared and submitted to the Nebraska Department of Education. For each variable the responses provided were tabulated and the percentage distribution reported. This has proved useful for statewide planning purposes.

4. Analysis Reports by Major Categories of Sensory Impairment:

Similar in content to the Statewide Summary, these analysis reports show the data according to the three major classifications of handicap: children with hearing impairments only, children with visual handicaps only, and children with both hearing and visual handicaps. These breakdowns have been of specific interest to the State Consultants with specific responsibility for one particular category of handicapped population.

5. Analysis Reports by 19 Educational Service Units (ESU):

To aid those who monitor the delivery of services to handicapped children in Educational Service Units, reports

were prepared showing the characteristics of the sensory impaired children in each of the 19 ESUs. Information relating to the specific handicaps and the educational services being provided were included.

6. Distribution of Children with Hearing Handicaps by Home Residence:

A review of all home addresses of children with hearing handicaps was conducted to determine the distribution of these children through the state. This was done for the Nebraska Department of Education in their attempt to assist a group planning parent workshops. The data aided in the selection of the most convenient sites for holding these meetings.

CONCLUSIONS AND RECOMMENDATIONS

There are a number of recommendations for the Survey which would enhance its utility as a management tool. As already pointed out, there were certain children who are not yet being reported into the system through their LEAs; these include a portion of the children at special schools such as NSD and NSVH and also a certain number of legally blind children who have been identified. Efforts during the third year should continue to focus on these children and the responsibility of the LEAs to maintain information on these children.

A continued emphasis on the quality of the data will be addressed to further reduce the non-response rates where they are high. As LEAs continue to improve their record keeping and become more aware of the importance of this information, there should be higher response rates.

CADS will continue to work closely with the staff at NDE to improve the data collection so as to minimize the amount of record keeping required. For example, where possible, if there is a need for collection of certain information for several sources, if it can be collected through the Survey of Sensory Impaired Children and Youth, this would reduce the amount of paper work at both the local and state levels. With this in mind, both the survey instrument and the data collection schedule will be reviewed to improve the system.

Continued efforts during the coming year will be made to increase awareness of the Survey of Sensory Impaired Children and Youth. As additional individuals become aware of the system's benefits to them in providing educational services to sensory impaired children, more applications of the data base will be found. This might be achieved through dissemination of newsletters and reports and additional workshops on the data management system.

The second year of the Nebraska Survey of Sensory Impaired Children and Youth was successful in a number of ways. As already indicated, the quality of the information collected during the 1981-82 school year was improved. There were much lower non-response rates for the majority of the variables on which data were sought. The LEAs were able to provide more specific information on the sensory impaired children than had been possible the previous year.

The population covered by the project was increased as more children were reported to the Survey. The increase was seen in all three categories of sensory impaired children. As compared with the 1980-81 survey, there was a 3% increase in the number of children with hearing impairments only who were reported, a 7% increase for those with visual handicaps only, and a 69% increase for the group with both visual and hearing impairments.

The number of LEAs which were represented in the survey as having sensory impaired children has also grown. The 844 childre reported the previous year came from 161 LEAs; this year, the 888 children came from 175 LEAs.

Perhaps the most positive factor has been the increased usage of the data management system by all levels of personnel serving the sensory impaired population in the state. Classroom teachers, diagnosticians, local, regional and state planners have all found the need to request information from the system to aid them in the delivery of educational services.

Reference

Rawlings, B.W. Final report Nebraska survey of sensory impaired children and youth, 1980-81. Gallaudet College, Office of Demographic Studies, 1981.

APPENDICES

1 1981-82 Survey Form

2 Local Education Agency Response Form

3 Newsletter

4 List of Local Education Agencies Submitting Survey Forms

5 Stanford Achievement Test - HI Score Report (Sample)

6 Detailed Tables A-Y

7 Individual Student Profile (Sample)

NEBRASKA STATE SURVEY OF SENSORY IMPAIRED CHILDREN AND YOUTH 1981–1982 SCHOOL YEAR

Nebraska Department of Education
Special Education Branch
Lincoln, NE 68509

Office of Demographic Studies
Gallaudet College
Washington, D.C. 20002

CONFIDENTIAL: All information which would permit identification of any individual or institution will be held strictly confidential and will be used only by Nebraska State Department of Education officials and O.D.S. staff for authorized purposes. The data will not be disclosed to others for any other reasons.

USE NO. 2 PENCIL ONLY

CORRECT ● ● ● ● ● INCORRECT ○ ◔ X ✓ ◉

- DO NOT USE INK, BALLPOINT OR FELTTIP PENS.
- MAKE NO STRAY MARKS.
- MARK AND WRITE IN DESIGNATED AREAS ONLY.

EXAMPLE: DATE IS JUNE 1981

	J	F	M	A	M	J	JL	A	S	O	N	D
MONTH						●						

	0	1	2	3	4	5	6	7	8	9
YEAR 8									●	
YEAR 1		●								

A. IDENTIFYING INFORMATION

1. STUDENT NAME: (LAST) (FIRST)

2. HOME ADDRESS: (STREET)

CITY STATE ZIP CODE

3. PARENT OR GUARDIAN NAME:

4. DATE OF BIRTH

PREVIOUSLY REPORTED DATE

NEW OR CORRECTED DATE

JAN				
FEB				
MAR	0	0	0	0
APR	1	1	1	1
MAY	2	2	2	2
JUN	3	3	3	3
JUL		4	4	4
AUG		5	5	5
SEP		6	6	6
OCT		7	7	7
NOV		8	8	8
DEC		9	9	9

5. SEX

PREVIOUS	NEW OR CORRECTED
	MALE
	FEMALE

B. EDUCATIONAL PROGRAM

1. LOCAL EDUCATION AGENCY:

2. PRESENT SCHOOL:

Is student still enrolled in this local Education Agency and school? PLEASE MARK *ONLY ONE:* (if new student, skip to item C)

- YES (If "YES," please complete remainder of this form.)
- STILL IN LEA, BUT TRANSFERRED TO ANOTHER SCHOOL WITHIN OUR LEA OR CONTRACTED SERVICES AT ANOTHER SITE (Complete remainder of this form.)
  - Name of school where student receives services
- NO, STUDENT NO LONGER THE RESPONSIBILITY OF THIS LEA (If "NO" there is no need to complete remainder of this form, but return it to survey office.) If known, indicate the LEA child has been transferred to

FOR OFFICE USE ONLY

0	0	0	
1	1	1	
2	2	2	
3	3	3	
4	4	4	
5	5	5	
6	6	6	
7	7	7	
8	8	8	
9	9	9	

*C. EDUCATIONAL SERVICES

1. DOES THIS SENSORY IMPAIRED STUDENT RECEIVE *SPECIAL EDUCATION* CLASSROOM INSTRUCTION? ○ YES ○ NO (go to 2)

If "YES", this student receives these services in a setting primarily designed for: (MARK ALL THAT APPLY)

- HEARING IMPAIRED STUDENTS ONLY
- VISUALLY HANDICAPPED STUDENTS ONLY
- MULTIPLY HANDICAPPED SENSORY IMPAIRED (including Deaf/Blind)
- STUDENTS WITH VARIOUS HANDICAPS, NOT ALL OF WHOM ARE SENSORY IMPAIRED
- STUDENT RECEIVES INSTRUCTION AT HOME

2. DOES THIS STUDENT RECEIVE *REGULAR CLASSROOM* INSTRUCTION WITH NON-HANDICAPPED STUDENTS, EITHER FULL OR PART-TIME?

YES NO (go to 3)

IF "YES", indicate *services* this student receives in support of this regular instruction. (IF NONE MARK HERE)

- INTERPRETER
- NOTE TAKER
- READER
- BRAILLE
- TUTOR OR SPECIAL AIDE
- LARGE PRINT
- RECORDED MATERIALS
- OTHER (specify)

3. IS SPEECH AND/OR AUDITORY TRAINING PROVIDED ON A REGULAR BASIS TO THIS STUDENT?

YES NO

4. IS THIS STUDENT ENROLLED IN A PARENT-CHILD PROGRAM?

YES NO

5. DOES THIS STUDENT RESIDE AT SCHOOL OR IN A GROUP OR FOSTER HOME DURING THE SCHOOL WEEK?

YES, RESIDES AT SCHOOL NO, RESIDES AT HOME

YES, RESIDES IN GROUP/FOSTER HOME

D. ETHNIC BACKGROUND (MARK ALL THAT APPLY)

- WHITE
- BLACK
- HISPANIC
- AMERICAN INDIAN (Native American)
- ORIENTAL (Asian American)
- OTHER
- PREVIOUS
- CANNOT REPORT
- UNKNOWN

E. ADDITIONAL HANDICAPPING CONDITIONS

1. DOES THIS STUDENT HAVE AN ADDITIONAL EDUCATIONALLY SIGNIFICANT HANDICAPPING CONDITION, OTHER THAN HEARING AND/OR VISUAL IMPAIRMENT? PREVIOUS YES NO

If "YES" mark all additional handicaps

PREVIOUS

- LEARNING DISABILITY
- EPILEPSY (Convulsive Disorder)
- HEART DISORDER
- OTHER HEALTH IMPAIRED (specify)
- MENTAL RETARDATION
- SPECIFIC LEARNING DISABILITY
- PHYSICALLY IMPAIRED
- OTHER (specify)

MAKE NO MARKS IN THIS AREA

46

001702

Office of Demographic Studies
Gallaudet College
Washington, D.C. 20002

Nebraska State Survey
Sensory Impaired Children & Youth
RESPONSE FORM

Nebraska Department of Education
Special Education Branch
Lincoln, Nebraska 68509

NAME/ADDRESS VERIFICATION

Please check and verify the information on the label below and enter any changes on the appropriate line(s) at the right. If you select another member of your educational staff to respond to survey activities, please indicate their name. Also write-in the phone number of the individual specified. Please do NOT remove or deface the label.

_____
(NAME)

_____
(TITLE)

_____
(Program Name)

_____
(Address)

_____
(City) (State)

_____
(Zip)

Telephone Number: _____

SENSORY IMPAIRED ENROLLMENTS

As of November 1, 1981, indicate the estimated number of hearing impaired and/or visually handicapped children (from birth to age 21) for which this Local Education Agency is responsible. Be sure to include children whose family reside in your LEA but who receive contracted services from another LEA or a special school such as the Nebraska School for the Deaf or the Nebraska School for the Visually Handicapped.
(See definitions on back of this page.)

☐ NO SENSORY IMPAIRED CHILDREN

_____
Number of Sensory Impaired Children

Signed: _____
(Signature)

_____
(Position Title)

Thank you. 47

Please return this form in the attached business reply envelope TODAY.

NEWSLETTER

Nebraska State Survey Sensory Impaired Children & Youth

Nebraska Department of Education
Lincoln, NE 68502

FALL 1981

Office of Demographic Studies
Gallaudet College
Washington, D.C. 20002

NEBRASKA DEPARTMENT OF EDUCATION LEADS THE NATION IN ESTABLISHING SURVEY OF SENSORY IMPAIRED CHILDREN

In the last two decades the nation has become increasingly concerned with its handicapped citizens, of the exceptional difficulties involved in educating them appropriately, and of the great need for the establishment and funding of specialized diagnostic, instructional, and rehabilitative services. Some of these concerns have been made manifest in the form of new federal and state laws, regulations, and guidelines relating to the improvement of educational opportunities for the handicapped. As public agencies have sought to expand appropriate educational services to the handicapped, the need for extensive, in-depth information about these children, the services they are receiving, and the learning outcomes of these services, has grown as well. Without this information, educational planners at the local and state levels cannot hope to understand the needs of the children they are mandated to serve, nor can they evaluate in any detail service availability or educational outcomes from program to program. In addition, the shrinking of public funds available for education, the need to allocate public resources wisely, and the increased emphasis on accountability are further reasons why educational planning should proceed from a sound data base, rather than subjective judgment.

Recognizing the importance of and need for detailed information on sensory impaired students and the programs that serve them in Nebraska, the Nebraska Department of Education, with the endorsement of the Commissioner of Education and the Board of Education, contracted with the Office of Demographic Studies (ODS) at Gallaudet College to establish a data management system on this handicapped population. This system will provide information for comprehensive educational planning at the state and local levels. The results of the first year of data collection activities are provided in additional sections of this newsletter.

A number of other states with the assistance of ODS have established data management systems on their hearing impaired student populations, but Nebraska is the first to expand this concept to include the visually handicapped. Other states will now be looking to Nebraska to discern what the educational characteristics of this sensory handicapped population are. In fact, following the lead of Nebraska, other states contracting with ODS have requested information on the Nebraska Survey, and some have begun expansion of their data management systems to include some or all of their visually handicapped students.

The staff at ODS look forward to continued collaboration with NDE staff at both the state and local levels as we strive to enhance the educational opportunities for children in Nebraska and provide special educators in other areas of the country with models of successful educational management.

NDE Staff: Carol Husk, Douglas Clark and Donna McKinley

LOW VISION SERVICES

One area addressed on the Nebraska Survey of Visually Handicapped Students is that pertaining to low vision evaluations. Many individuals have heard of low vision services but are not quite sure what these services entail. Low vision services are special services for partially-sighted individuals who, for whatever reason—disease, injury, birth defects, etc.—have a functional loss of vision. They have a slight to severe restriction in their activities as a result of their visual loss. Low vision services restore some functional vision by prescribing and training partially-sighted persons in the use of special optical and/or non-optical aids. The ultimate goal is to identify an aid or aids that enhance vision, thus enabling the low vision individual to do the things he or she desires to do.

Several ophthalmologists and optometrists have received annual program rate approvals from the Nebraska State Board of Education to provide these diagnostic services. Evaluation expenses and prescribed low vision devices may be included in the school district's Special Education Plan/Budget for excess cost reimbursement.

If you have any questions concerning these evaluation procedures or need a list of doctors who have an approved annual program rate, please contact Donna McKinley (402) 471-2471.

NEBRASKA MASTER PLAN FOR DEAF-BLIND CHILDREN

The Nebraska Department of Education, in cooperation with other state and federal agencies, is in the process of developing a statewide master plan which will address the needs of deaf-blind children and services available to meet these needs. This project resulted from the need to examine the funding of educational and support services when the federal categorical funds for deaf-blind terminate in June, 1983.

It is anticipated that the Master Plan for Deaf-Blind Children will outline the steps necessary to insure the continuity of services as well as a continuum of services. Issues to be addressed include: role of interagency agreements, outreach/consultant services, legislation, appropriate agency roles, parent/family services, relevant funding issues, educational services, and adult services. The completed Master Plan should be available in summer, 1982.

FIRST YEAR OF NEBRASKA SURVEY PROVIDES VALUABLE INFORMATION

During the 1980–81 school year, the Survey of Sensory Impaired Children and Youth sponsored by the Special Education Branch of the Nebraska Department of Education identified approximately 850 sensory impaired children in Nebraska. In January, 1981, the ODS contacted over 400 Local Education Agencies (LEAs) in order to determine which LEAs presently were serving or responsible for any sensory impaired children within their districts. Follow-up questionnaires were then distributed to those LEAs known to have such children. In all, information on 844 sensory impaired children between the ages of 0 to 21 was returned from 162 LEAs across the State (Figure 1).

FIGURE 1: Participation in the Nebraska Survey of Sensory Impaired Children and Youth: 1980-1981

The information supplied by the LEAs included demographic data on the children, information related to their sensory handicaps and any other educationally significant handicap, as well as information related to the educational services the children were receiving.

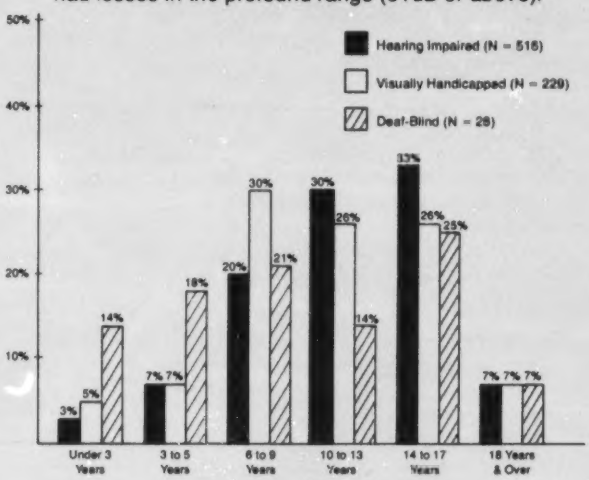
The largest category of these children included 546 children who had hearing impairments only. An additional 238 children were reported to have visual handicaps, and 32 children were deaf-blind. An additional 28 children were reported to the survey office as sensory impaired, but their handicaps were not specified. (It is hoped that during the 1981–82 academic year these children's status will be clarified and that responses will be obtained for specific variables which were not reported for other students.)

The LEAs which reported children to the survey office are shown in Figure 1. As can be seen, coverage was quite widespread, with the heaviest reporting in the eastern section of the state near the major metropolitan areas.

Seventy percent of these sensory impaired children were receiving their educational training in their home LEAs, while 22% were attending the Nebraska School for the Deaf; 6% of the sensory impaired students were enrolled at the Nebraska School for the Visually Handicapped.

Additional highlights of the Nebraska Survey:

- Two-thirds of the sensory impaired children were receiving special educational services either full- or part-time.
- Over half (57%) of the sensory impaired children were receiving either all or part of their educational training with non-handicapped students. Tutors and teacher consultants were the most frequently reported support services provided to these children when they were integrated with non-handicapped students.
- The majority of sensory impaired students are males—57% of the hearing impaired, 64% of the visually handicapped, and 66% of the deaf-blind.
- Seventy-three percent of the deaf-blind children were reported to have additional educationally significant handicaps; 21% of the hearing impaired children had an additional handicap, compared to 45% of the visually handicapped.
- For each category of sensory impairment, mental retardation was the most frequently reported *additional* handicap.
- Maternal rubella was the most frequently reported cause of hearing loss of children with a hearing impairment.
- Nystagmus was the most frequently reported cause of visual impairments.
- The largest number of sensory impaired children (245) were in the age category 14 to 17 years of age. The age distribution for each category of sensory impairment is shown in Figure 2.
- Almost one-third of the children with hearing impairments had losses in the profound range (91dB or above).



*Information was not available for 71 children.

FIGURE 2: Percentage Distribution by Age* of Sensory Impaired Children in Nebraska: 1980-81

DATES TO REMEMBER

November 23–24, 1981 — Workshop: "Meeting the Prevocational and Vocational Needs of Multi-handicapped/Visually Handicapped Individuals"

Place: Nebraska School for the Visually Handicapped

Contact: Donna McKinley (402) 471-2471 or Jerry Regier (402) 873-5513

June 28–July 2, 1982 — Association For Education of The Visually Handicapped (AEVH), National Conference

Place: Vancouver, British Columbia

Contact: Donna McKinley (402) 471-2471

June 7–July 9, 1982 — Training Program for Teachers of the Visually Handicapped

Place: Barkley Memorial Center University of Nebraska-Lincoln

Contact: Dr. Dewaine Alcorn (402) 472-3955

CAREER EDUCATION AT NEBRASKA SCHOOL FOR THE DEAF

On the premise that if students can see relationships between school subjects and the world of work they will be motivated to learn more in school, Nebraska School for the Deaf (NSD) responded to an invitation to participate in the National Project on Career Education (NPCE). As a result, a team was sent to St. Paul, Minnesota, in September, 1980, for one week of intensive training in the career education concept as it applies to the hearing impaired.

Since that time, a series of in-service sessions on career education have been conducted by a team of trainers. NSD teachers and administrators are developing skills in this area which will eventually lead to curriculum infusion with adaptability tools, work values, and decision-making and job-hunting skills which will better prepare the hearing impaired individual to compete in the business world.

SCHEDULED SURVEY ACTIVITIES FOR 1981–82

Plans for the 1981–82 Nebraska Survey are well underway; in November all Local Education Agencies will be contacted to determine if they have any sensory impaired children. In January those LEAs with such children will be asked to complete survey forms on each sensory impaired child. For those that participated in the survey last year, this will simply entail providing missing data or more current information. New forms should be completed on children not previously identified.

An additional service to be provided this year for hearing impaired students will be the availability of the Stanford Achievement Test for Hearing Impaired Students (SAT-HI). Tests will be provided by the survey office, and scoring services will also be available at no charge. More information on this opportunity will be provided in correspondence with the LEAs.

If there is sufficient interest, ODS will provide workshops for Nebraska school personnel who are interested in learning more about the SAT-HI, its administration, and the interpretation of the results. It is possible that these workshops could be held in Lincoln, Omaha, and Cozad early in 1982. If you would be interested in participating in such workshops, would you please notify Brenda Rawlings at the Office of Demographic Studies, Gallaudet College, Washington, D.C. 20002. You might indicate the number of staff interested and the site you would prefer attending.

GRADUATE FOLLOW-UP PROJECT OF SECONDARY PROGRAMS FOR THE DEAF

The Graduate Follow-Up Project is a project to identify the current comparative status of graduates in terms of employment, occupation, income, and continuing education.

The procedures for this project were developed by the Educational Research Committee of the Conference of Educational Administrators Serving the Deaf (CEASD) with the assistance of the National Technical Institute for the Deaf, Rochester, New York, and field tested by seven schools for the deaf during the 1979–80 school year. Nebraska School for the Deaf (NSD) was one of these seven schools.

The project was continued in 1980–81, with nineteen schools participating. NSD is now entering the third year of this project. The system is designed to gather information from five graduating classes each year, and the focus of the 1981–82 school year is on alumni who graduated in 1981, 1979, 1977, 1971, and 1961.

NSD staff have been very pleased with the 75% response rate from their alumni, and feel that the information gathered will aid in planning better programs to meet the needs of students presently attending NSD.

APPLE II MICROCOMPUTER TALKS

NSVH students and teacher try new computer equipment.

Two new pieces of equipment arrived at the Nebraska School for the Visually Handicapped (NSVH) last spring. These are the Apple II Microcomputer and the Total Talk synthesized speech terminal. These two units can interface, thus creating an audio output for visually handicapped users enabling them to use the computer independently. Five levels of utilization are being developed for this equipment:

1. Tutorial: provide repetitive instruction on subjects such as math, spelling, state capitals, and parts of speech.
2. Diagnosis: check for areas of instruction that need remediation.
3. Pre-vocational: learn skills necessary for occupations that involve computer technology.
4. Computer literacy: basic knowledge about computers and how they effect our lives.
5. Administrative: maintain address files, student files, and inventories.

This year three students are learning to use Total Talk to generate written material via a printer. Computer literacy and programming will be studied. Four other students are interacting directly with the Apple II Computer.

Synthesized voice processors and microcomputers are only the beginning of how micro-electronics will meet the needs of visually handicapped persons. (This article was submitted by Phyllis Brunken, Media Specialist at NSVH; please contact her for information on this equipment.)

THE STANFORD ACHIEVEMENT TEST FOR HEARING IMPAIRED STUDENTS

Since the early 1970's, the ODS has been working with the Psychological Corporation, publishers of the Stanford Achievement Test (SAT) to develop, standardize, and market a test suitable for hearing impaired students. The product of these efforts has been the Stanford Achievement Test for Hearing Impaired Students (SAT-HI) which provides the benefits of measuring hearing impaired children's achievement and of comparing their scores both to hearing impaired children of similar ages across the country and also to normally hearing children. The SAT-HI has been in use since 1974, and numerous publications reporting the results of the use of this instrument are available for the ODS.

In the 1982–83 school year the Psychological Corporation will publish a new version of the Stanford Achievement Test to replace the edition which has been in use since 1973. The development of this test has been progressing for several years. Curricula have been evaluated and items have been written and assessed for their statistical properties. One important project in the test development process has been the assessment of the test items for possible bias against certain groups. In a standardized test it is important that test items do not place certain

subgroups of test-takers at unfair advantages over other groups.

Input was sought from various groups representing racial minorities, women's interests, and the visually handicapped. The Office of Demographic Studies represented the hearing impaired community in this item bias project. Last July ODS sent out booklets to reviewers all over the country who were involved with the education of hearing impaired children. The booklets contained the proposed test items for the new Stanford. The reviewers were asked to address comments regarding specific items which they felt were in some way biased against hearing impaired children.

Nearly 400 item-related comments were received; ODS staff edited these comments, compiled a report, and sent it to the test publishers. Since that time members of the ODS staff have had a glimpse at what the new Stanford Achievement Test will look like, and we are quite happy to report that many of our collective comments influenced the final item selection. It should also be noted that this marks the first time that the opinions of educators of hearing impaired students have been taken into account at such an early stage during the development of a major standardized test for hearing students.

1981 EDITION OF COLLEGE/CAREER GUIDE FOR DEAF STUDENTS

The time of year has come again when high school seniors are pondering what they will be doing after graduation. The 1981 edition of the *Guide to College/Career Programs for Deaf Students* may help some of those who are thinking about continuing their education in either technical-vocational areas or liberal arts subjects.

This is the fourth edition of the *Guide*, which provides a brief description of 57 postsecondary programs for deaf students in the U.S. and Canada. This resource is designed for use by students, parents, counselors, and teachers, and offers suggestions on selecting appropriate programs. It also outlines the vast range of careers in which deaf students are presently majoring at these facilities.

This publication has been prepared by the Office of Demographic Studies; the cost is underwritten by Gallaudet College and the National Technical Institute for the Deaf. Copies are available free-of-charge by writing to the Office of Demographic Studies.

NEBRASKA DEPARTMENT OF EDUCATION
(Selected Listing)

M. Anne Campbell, Commissioner of Education
Joe E. Lutjeharms, Deputy Commissioner
Gary M. Sherman, Director of Special Education
Douglas H. Clark, Director of State Facilities for the Handicapped
Carol Husk, State Consultant for the Hearing Impaired
Donna McKinley, State Consultant for the Visually Handicapped
George Collins, Administrator, Nebraska School for the Deaf
Jerry Regler, Administrator, Nebraska School for the Visually Handicapped
Dave Crawford, Administrator, Nebraska Diagnostic Resource Center

State Board of Education Members

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THE ODS TO BECOME CENTER FOR ASSESSMENT AND DEMOGRAPHIC STUDIES

Reflecting the office's increasing emphasis on educational assessment studies and recognizing the consolidation of research laboratories at Gallaudet College, the Office of Demographic Studies in the future will be known as the Center for Assessment and Demographic Studies (CADS). As part of the Research Institute at Gallaudet College, CADS will continue its activities in the area of population studies and work in developing appropriate assessment instruments for use with hearing impaired children.

The Center was established almost 15 years ago at Gallaudet in response to the concern of educators, audiologists, legislators, psychologists and others working in the field of hearing impairment, who indicated a need for national data on hearing handicapped students. Initial funding for the development of these population studies came from the Bureau of Education for the Handicapped, U.S. Department of Health, Education and Welfare. Present funding is provided by Gallaudet College, whose program and services receive substantial support from the Department of Education.

While the Center is intended to be permanent and national in scope, it does not aim to replace or absorb the work of other programs at the state or local level which are devoted to the collection and dissemination of information on handicapped children and youth. Rather, it seeks to facilitate their work through cooperation whenever this is possible. Nor does the office view itself as the center for all types of research in this field. It focuses its activities on collecting and disseminating state and national baseline data on selected topics of general concern to those interested in special education. It seeks to make available to researchers, administrators, and other professionals the vast amount of information it possesses and any special services it can render to them.

One restriction which is observed by the Center is that no data will be released which permits the identification of an individual student or cooperating program. Exception to this occurs only when a written release is obtained from the program supplying the information. Otherwise, independent researchers using the data have access only to summary statistics or coded information.

The Center seeks to avoid associating itself with an established position relating to controversial issues within the field of special education. Thus, it does not draw policy conclusions from its data. Rather, it seeks to facilitate the use of its data by reputable individuals or organizations that may themselves wish to draw policy implications or test research hypotheses that are related to these issues.

Personnel can be reached by phone at 202-651-5300 Voice or TDD.

*Michael A. Karchmer, Director
Thomas Allen, Senior Research Associate
*Brenda Rawlings, Senior Research Associate and Nebraska Project Coordinator
Arthur Schildroth, Senior Research Associate
Corinne White, Senior Research Associate
*Kathleen Berault, Research Technician

*These individuals can assist you with specific questions relating to the Nebraska State Survey.

ODS Staff: Kathleen Berault, Michael Karchmer, Brenda Rawlings and Arthur Schildroth

APPENDIX 4

NUMBER OF SENSORY IMPAIRED CHILDREN BY LOCAL EDUCATION AGENCY

RS#	Name of Reporting Source (or Local Education Agency)	Number of Students
133	Adams Public Schools	1
012	Albion Public School Administration	1
016	Alliance Public School Administration	5
029	Amherst Public School Administration	1
126	Arapahoe Public Schools	1
076	Arnold Public Schools	1
009	Arthur County High School	1
278	Ashland Greenwood Public School	4
231	Auburn Public School Administration	1
159	Aurora Schools	4
218	Battle Creek Public School Administration	1
132	Beatrice Public Schools	7
071	Beemer Public Schools	9
274	Bellevue Public Schools	11
110	Benkelman Public School Administration	1
089	Big Springs Public Schools	1
316	Blair Community School Administration	1
428	Bloomington Public Schools	1
416	Box Butte County Public School Administration	1
227	Bridgeport Public School Administration	1
073	Broken Bow Public Schools	1
380	Buffalo County Public School Administration	1
355	Butler County Public School Administration	1
128	Cambridge Public Schools	1
335	Cass County Public School Administration	2
283	Cedar Bluffs Public School Administration	1
222	Central City Public School Administration	3
172	Chambers Public Schools	2
088	Chappell Public School Administration	1
414	Cherry County Public School Administration	1
224	Clarks Public School Administration	1
060	Clay Center Public Schools	1
253	Columbus City Schools	4
084	Cozad City Schools	2
270	Crete Public Schools	9
035	David City Public Schools	1
268	Dawson-Vernon Public School Administration	1
031	Decatur Public Schools	1
151	District 38 Administration	6
193	Dix Public Schools	1
425	Dodge County Public School Administration	1

237	Douglas Public School Administration	3
102	Elkhorn Public Schools	3
220	Elkhorn Valley School Administration	1
041	Elmwood Public School Administration	1
142	Elwood Public Schools	2
093	Emerson-Hubbard Community Schools	2
170	Ewing Public School Administration	1
113	Exeter Public School Administration	1
177	Fairbury Public Schools	3
266	Falls City Public School Administration	1
317	Fort Calhoun Public School Administration	1
120	Franklin Public Schools	2
094	Fremont Public Schools	7
272	Friend Public School Administration	3
117	Geneva Public Schools	3
229	Genoa Public School Administration	1
287	Gering Public School Administration	3
297	Gordon Public School Administration	1
085	Gothenburg Public Schools	1
148	Grand Island Public Schools	30
144	Greeley Public Schools	1
276	Gretna Public School Administration	6
010	Harrisburg Public Schools	1
059	Harvard Public Schools	3
002	Hastings Public Schools	8
017	Hemingford Public Schools	1
332	Henderson Public School Administration	1
247	Holdrege Public School	1
366	Holt County Public School Administration	2
095	Hooper Elementary School	1
384	Howard County Public School Administration	1
066	Howells Public School Administration	1
143	Hyannis Rural High School	2
341	Jefferson County Public School Administration	2
230	Johnson-Brock Public School Administration	1
024	Kearney Public Schools	7
408	Keith County Public School Administration	6
191	Keya Paha County High School Administration	2
194	Kimball Public School Administration	1
351	Lancaster County Public Schools	2
045	Laurel Public School Administration	1
064	Leigh Public Schools	1
082	Lexington Public Schools	3
402	Lincoln County Public School	1
203	Lincoln Public Schools	115
249	Loomis Public School Administration	1
039	Louisville Public Schools	2
284	Lyman Public Schools	1
021	Lynch Public School Administration	1
205	Malcolm Public Schools	1
155	Marquette Public Schools	1

123	Maywood Public Schools	2
262	McCook Central Elementary School	1
331	McCool Junction Public School Administration	1
124	Medicine Valley Public Schools	3
290	Melbeta Public School Administration	1
180	Meridian Public Schools	2
104	Millard Public Schools	26
116	Milligan Public Schools	3
285	Minature Public School Administration	4
288	Mitchell Public School Administration	2
255	Monroe Public School Administration	1
286	Morrill Public School Administration	2
042	Murdock Public School Administration	1
356	Nance County Public School Administration	1
238	Nebraska City Public School Administration	10
184	Nemaha Valley Schools	2
198	Niobrara Public Schools	1
217	Norfolk Public School Administration	2
206	Norris School District 16 Administration	2
100	North Bend Jr-Sr High Administration	1
208	North Platte Public School Administration	12
152	Northwest High School	2
168	O'Neill Public Schools	1
134	Odell Public Schools	1
101	Omaha Public Schools	256
008	Orchard Public Schools	1
314	Ord Public School Administration	3
258	Osceola Public School Administration	3
225	Palmer Public School Administration	1
275	Papillion Public Schools	7
015	Petersburg Public Schools	5
251	Plainview Public Schools	6
352	Platte County Public School Administration	1
037	Plattsmouth Community Schools	5
260	Polk Public School Administration	3
056	Potter Public Schools	1
106	Ralston Public Schools	5
027	Ravenna Public School Administration	3
207	Raymond Central School	3
349	Saline County Public School Administration	1
062	Sandy Creek Schools	1
199	Santee Public Schools	1
337	Saunders County Public School	1
067	Schuyler Central High School Administration	1
063	Schuyler Grade School	6
289	Scottsbluff Public School Administration	10
292	Seward Public School	1
423	Sheridan County Public School Administration	1
054	Sidney Public Schools	5
223	Silver Creek Public School Administration	1
096	Snyder Public School Administration	1

078	South Sioux City Public Schools	6
174	St. Paul Public Schools	16
370	Stanton County Public School Administration	2
301	Stanton Public School Administration	3
214	Stapleton Public Schools	2
171	Stuart Public Schools	1
058	Sutton Public Schools	1
236	Syracuse-Dunbar-Avoca Administration	3
030	Tekamah-Herman School Administration	2
308	Thedford High School	1
061	Trumbull Public School Administration	1
051	Valentine Middle School	1
244	Venango Public School Administration	1
201	Verdigre Public Schools	1
280	Wahoo Public School Administration	3
320	Wakefield Community School	1
213	Wallace Public School Administration	1
311	Walthill Public School Administration	1
430	Ward of the State	2
204	Waverly Public Schools	10
038	Weeping Water Public Schools	2
169	West Holt High School	1
068	West Point Elementary School	4
108	Westside Community Schools	33
246	Wheatland Public School Administration	1
273	Wilber Public School Administration	1
313	Winnebago Public Schools	1
321	Winside Public School Administration	1
070	Wisner-Pilger Public Schools	5
153	Wood River Rural High School	3
328	York Public Schools	14
279	Yutan Public School Administration	2
	TOTAL:	888

SAMPLE

OFFICE OF DEMOGRAPHIC STUDIES
STANFORD ACHIEVEMENT TEST ANALYSIS

EXAMINEE: NO ONE, John
TEST LEVEL: 3
SCHOOL: NO PLACE SCHOOL, NO PLACE, U.S.A.

BIRTHDATE: 6/6/66
TEST DATE: 3/3/78
AGE AT TESTING: 11

Subtest Area	No. of Items	Right	Wrong	Blank	Percent Right	Scale Score	Grade Equiv	H.I. Rank
VOCABULARY	37	18	19	0	48	115	2.0	78
Reading and Literature	13	4	9	0	30			
Nonfiction and Reference	6	2	4	0	33			
Mathematics and Science	9	4	5	0	44			
Social Science	9	8	1	0	88			
READING COMPREHENSION	70	41	29	0	58	136	3.4	81
Global Meaning	6	4	2	0	66			
Explicit Meaning	19	6	13	0	31			
Implicit Meaning	19	13	6	0	68			
Meaning Determined by Context	13	10	3	0	76			
Inferential Meaning	13	8	5	0	61			
MATHEMATICS CONCEPTS	32	20	12	0	62	151	4.7	83
Numbers	8	4	4	0	50			
Notation	11	6	5	0	54			
Operations	8	5	3	0	62			
Geometry, Measurement, Etc.	5	5	0	0	100			
MATHEMATICS COMPUTATION	40	16	2	22	40	151	4.5	59
Knowledge of Primary Facts	18	6	1	11	33			
Addition and Subtraction	9	5	1	3	55			
Multiplication and Division	13	5	0	8	38			
MATHEMATICS APPLICATION	28	22	6	0	78	151	4.6	82
Solution of One-Step Problem	7	7	0	0	100			
Analysis and Solution Design	13	10	3	0	76			
Measurement	8	5	3	0	62			
LANGUAGE	55	1*	1	53	1	55	1.0	1
Capitals, Punctuation, Usage	38	0	0	38	0			
Word Sensitivity	11	1	0	10	9			
Recognizing Complete Sentences	6	0	1	5	0			

*This score is below what would be expected from pure guessing.

SAMPLE

TABLE A

NUMBER AND PERCENTAGE DISTRIBUTION
OF SENSORY IMPAIRED CHILDREN IN NEBRASKA
BY EDUCATIONAL SERVICE UNIT: 1981-82

Educational Service Units	TOTAL N	TOTAL %	Hearing Impaired Only N	Hearing Impaired Only %	Visually Handicapped Only N	Visually Handicapped Only %	Hearing and Visually Handicapped N	Hearing and Visually Handicapped %
TOTAL	888	100%	562	63%	254	29%	54	6%
ESU 1	10	100%	9	90%	1	10%	--	--
ESU 2	43[c]	100%	26	60%	10	23%	4	9%
ESU 3	105[c]	100%	72	69%	22	21%	8	8%
ESU 4	22	100%	11	50%	9	41%	2	9%
ESU 5	16	100%	6	38%	9	56%	1	6%
ESU 6	56	100%	31	55%	16	29%	9	16%
ESU 7	30	100%	15	50%	14	47%	1	3%
ESU 8	25	100%	16	64%	9	36%	--	--
ESU 9	20[a]	100%	16	80%	3	15%	--	--
ESU 10	62[b]	100%	42	68%	15	24%	3	5%
ESU 11	8[a]	100%	5	63%	2	25%	--	--
ESU 12	10[a]	100%	3	30%	6	60%	--	--
ESU 13	24[c]	100%	15	63%	5	21%	1	4%
ESU 14	10	100%	8	80%	2	20%	--	--
ESU 15	7	100%	5	71%	1	14%	1	14%
ESU 16	29[a]	100%	17	59%	7	24%	4	14%
ESU 17	4	100%	2	50%	2	50%	--	--
ESU 18	115[a]	100%	84	73%	26	23%	4	3%
ESU 19	257[b]	100%	156	61%	86	33%	13	5%
LEA not part of an ESU	35	100%	23	66%	9	26%	3	9%

[a] 1 sensory impaired child reported by this ESU but not specified if hearing or visual handicap.

[b] 2 sensory impaired children reported by this ESU but not specified if hearing or visual handicap.

[c] 3 sensory impaired children reported by this ESU but not specified if hearing or visual handicap.

TABLE B

PERCENTAGE DISTRIBUTION BY SEX
OF SENSORY IMPAIRED CHILDREN IN NEBRASKA, 1981-82[a]

Sex	Hearing Impaired Only	Visually Handicapped Only	Hearing & Visually Impaired
Both sexes	100%	100%	100%
Males	54%	64%	69%
Females	46%	35%	31%

[a] Excludes 5 children who are only hearing impaired, 4 who are only visually handicapped and 3 who have both hearing and visual impairments for whom data were not reported.

TABLE C

PERCENTAGE DISTRIBUTION BY ETHNIC ORIGIN
OF SENSORY IMPAIRED CHILDREN IN NEBRASKA, 1981-82[a]

ETHNIC ORIGIN	Hearing Impaired Only		Visually Handicapped Only		Hearing & Visually Impaired	
	N	%	N	%	N	%
Total Students	557	100.0%	252	100.0%	54	100.0%
White	510	91.5%	218	86.5%	51	94.4%
Black	25	4.5%	23	9.1%	1	1.9%
Hispanic	12	2.2%	5	2.0%	1	1.9%
Other or Multi-Ethnic	10	1.8%	6	2.4%	1	1.9%

[a] Excludes 5 children who are only hearing impaired and 2 who are only visually handicapped for whom data were not reported.

TABLE D

NUMBER AND PERCENTAGE DISTRIBUTION OF SENSORY IMPAIRED CHILDREN BY AGE IN NEBRASKA, 1981-82

AGE[a]	All Sensory Impaired		Hearing Impaired Only		Visually Handicapped Only		Hearing & Visually Impaired	
	N	%	N	%	N	%	N	%
Total Children[b]	853	100.0	552	100.0	249	100.0	52	100.0
Under 1 year	14	1.6	3	0.5	11	4.3	-	---
1 year	10	1.2	4	0.7	4	1.6	2	3.8
2 years	20	2.3	14	2.5	4	1.6	2	3.8
3 years	33	3.9	15	2.7	12	4.7	6	11.5
4 years	37	4.3	23	4.2	8	3.1	6	11.1
5 years	26	3.0	18	3.3	7	2.8	1	1.9
6 years	38	4.5	24	4.3	11	4.3	3	5.6
7 years	55	6.4	29	5.3	22	8.7	4	7.4
8 years	42	4.9	26	4.7	15	5.9	1	1.9
9 years	51	6.0	33	6.0	17	6.7	1	1.9
10 years	56	6.6	35	6.3	17	6.7	5	9.3
11 years	51	6.0	38	6.9	11	4.3	2	3.7
12 years	65	7.6	47	8.5	18	7.1	-	---
13 years	52	6.1	33	6.0	14	5.5	5	9.3
14 years	64	7.5	47	8.5	15	5.9	2	3.7
15 years	44	5.2	27	4.9	13	5.1	4	7.4
16 years	65	7.6	46	8.3	17	6.7	2	3.7
17 years	68	8.0	50	9.1	14	5.5	4	7.4
18 years	46	5.4	33	6.0	11	4.3	2	3.7
19 years & older	15	1.8	7	1.3	8	3.2	-	---

[a] Age as of December 31, 1981

[b] This excludes 10 children who are only hearing impaired, 5 who are only visually handicapped, and 2 who are both hearing and visually impaired whose ages were not reported.

TABLE E

PERCENTAGE DISTRIBUTION OF ALL CHILDREN WITH A HEARING IMPAIRMENT BY SITE OF SERVICE AND AGE, 1981-82[a]

AGE	SERVED BY LOCAL EDUCATION AGENCY	ATTEND NEBRASKA SCHOOL FOR THE DEAF
Total Students	100%	100%
Under 3 years of age	3%	3%
3-5 years	10%	7%
6-9 years	25%	13%
10-13 years	31%	23%
14-17 years	26%	43%
18 years and over	5%	13%

[a] This represents all students with a hearing impairment but excludes 12 students for whom data were not reported.

TABLE F

PERCENTAGE DISTRIBUTION OF ALL CHILDREN WITH A VISUAL HANDICAP BY SITE OF SERVICE AND AGE, 1981-82[b]

AGE	SERVED BY LOCAL EDUCATION AGENCY	ATTEND NEBRASKA SCHOOL FOR THE VISUALLY HANDICAPPED
Total Students	100%	100%
Under 3 years of age	9%	--
3-5 years	16%	--
6-9 years	26%	22%
10-13 years	24%	31%
14-17 years	22%	34%
18 years and over	7%	12%

[a] This represents all students with a visual handicap only and deaf-blind students but excludes 6 students for whom data were not reported.

TABLE G

NUMBER AND PERCENTAGE DISTRIBUTION OF TYPES OF EDUCATIONAL SERVICES RECEIVED BY OF SENSORY IMPAIRED CHILDREN IN NEBRASKA, 1981-82

EDUCATIONAL SERVICES	Hearing Impaired Only		Visually Handicapped Only		Hearing & Visually Impaired	
	N	%	N	%	N	%
Total Students	562	100%	254	100%	54	100%
Special Education Services Only	223	40%	87	34%	36	67%
Special Education -- unknown if any regular classroom instruction	7	1%	5	2%	3	6%
Regular classroom instruction only	176	31%	91	36%	4	7%
Regular classroom -- unknown if any special education	5	1%	4	2%	1	2%
Both regular classroom and special education	134	24%	59	23%	7	13%
No regular classroom instruction and no special education services	7	1%	3	1%	1	2%
No special education -- unknown if regular classroom instruction	2	*	1	*	1	2%
No regular classroom instruction -- unknown if special education	--	--	--	--	--	--
Unknown services	8	1%	4	2%	1	2%

*Less than 1%

TABLE H

NUMBER AND PERCENTAGE DISTRIBUTION OF SUPPORT SERVICES PROVIDED TO OF SENSORY IMPAIRED CHILDREN IN NEBRASKA, 1981-82

EDUCATIONAL SERVICES	Hearing Impaired Only N	%	Visually Handicapped Only N	%	Hearing & Visually Impaired N	%
Total receiving regular classroom instruction[a]	310		150		11	
Regular Classes Only	176		91		4	36%
No support services	95	56%	22	24%	--	
Interpreter	3	2%	--		--	
Note taker	1	1%	1	1%	1	9%
Tutor	3	2%	--		1	9%
Reader	--		7	8%	--	
Braille	--		9	10%	--	
Large print	--		27	30%	2	18%
Recorded materials	2	1	26	29%	--	
Other support	32	18%	29	32%	3	27%
All blank	45	26%	13	14%	1	9%
Regular and Special	134		59		7	
No support services	37	28%	5	8%	2	
Interpreter	21	16%	--		--	
Note taker	9	7%	2	3%	--	
Tutor	2	1%	2	3%	--	
Reader	1	1%	2	3%	1	
Braille	--		8	14%	1	
Large print	1	1%	11	19%	2	
Recorded materials	3	2%	11	19%	2	
Other support	44	33%	26	44%	1	
All blank	38	28%	11	19%	1	
Regular but unknown if Special Education Services	5		4		1	
No support services	--		1		1	
Interpreter	--		--		--	
Note taker	--		--		--	
Tutor	--		--		--	
Reader	--		--		--	
Braille	--		1		--	
Large print	--		--		--	
Recorded materials	--		--		--	
Other support	4	80%	--		--	
All blank	1	1%	2	5%	--	

* Percents may not total 100% as multiple services were reported for some children.

[a] This excludes 5 children who are only hearing impaired, 4 who are only visually handicapped, and 1 child with both hearing and visual impairments for whom it was unknown if they were receiving special education services.

TABLE I

NUMBER AND PERCENTAGE DISTRIBUTION OF SENSORY IMPAIRED CHILDREN IN NEBRASKA RECEIVING SPEECH AND AUDITORY TRAINING, 1981-82[a]

	Hearing Impaired Only		Visually Handicapped Only		Hearing & Visually Impaired	
	N	%	N	%	N	%
Total Students	544	100%	239	100%	51	100%
Receiving Training	350	64%	83	65%	33	65%
Not Receiving Training	194	36%	156	35%	18	35%

[a] Excludes 18 children who are only hearing impaired, 17 who are only visually handicapped, and 3 children who are both hearing and visually impaired for whom data were not reported.

SCREENING DATA ANALYSIS
File NONAME (Creation date = 10-Aug-82)

NRRS

Category label	Code	Absolute freq	Relative freq (%)	Adjusted freq (%)	Cum freq (%)
	15.	1	0.7	0.7	0.7
	16.	1	0.7	0.7	1.5
	18.	1	0.7	0.7	2.2
	21.	4	3.0	3.0	5.2
	22.	5	3.7	3.7	8.9
	23.	6	4.4	4.4	13.3
	24.	13	9.6	9.6	23.0
	25.	17	12.6	12.6	35.6
	26.	12	8.9	8.9	44.4
	27.	12	8.9	8.9	53.3
	28.	17	12.6	12.6	65.9
	29.	16	11.9	11.9	77.8
	30.	15	11.1	11.1	88.9
	31.	9	6.7	6.7	95.6
	32.	6	4.4	4.4	100.0
	Total	135	100.0	100.0	

Mean	26.778	Std err	0.279	Median	27.125
Mode	25.000	Std dev	3.245	Variance	10.532
Kurtosis	0.961	Skewness	-0.741	Range	17.000
Minimum	15.000	Maximum	32.000		

Valid cases 135 Missing cases 0

SCREENING DATA ANALYSIS
File NONAME (Creation date = 10-Aug-82)

TABLE K

NUMBER AND PERCENTAGE DISTRIBUTION OF ADDITIONAL HANDICAPPING CONDITIONS AMONG SENSORY IMPAIRED CHILDREN IN NEBRASKA, 1981-82[a]

ADDITIONAL HANDICAPS	Hearing Impaired Only		Visually Handicapped Only		Hearing & Visually Impaired	
	N	%	N	%	N	%
Total Students	553	100.0%	253	100.0%	53	100.0%
One or More Additional Handicaps	133	24.0%	125	49.0%	42	79.0%
No Additional Handicaps	420	76.0%	128	51.0%	11	21.0%
Total Number of Conditions	(157)		(226)		(112)	
Brain Damage or Injury	6	1.1%	23	9.1%	17	32.1%
Epilepsy	6	1.1%	13	5.1%	12	22.6%
Orthopedic	7	1.3%	24	9.5%	18	34.0%
Cerebral Palsy	18	3.3%	29	11.5%	16	30.2%
Heart Disorder	3	0.5%	2	0.8%	5	9.4%
Other Health Impaired	9	1.6%	5	2.0%	5	9.4%
Mental Retardation	30	5.4%	74	29.2%	31	58.5%
Behaviorally Impaired	6	1.1%	15	5.9%	4	7.5%
Specific Learning Disability	48	8.7%	25	10.0%	3	5.7%
Other Handicaps	24	4.3%	16	6.3%	1	1.9%

[a] Excludes 19 children who are only hearing impaired, 1 who is only visually handicapped, and 1 child with both handicaps for whom data were not reported.

TABLE L

PERCENTAGE DISTRIBUTION OF ADDITIONAL HANDICAPPING CONDITIONS AMONG ALL CHILDREN WITH A HEARING IMPAIRMENT BY SITE OF SERVICE, 1981-82[a]

ADDITIONAL HANDICAPS	SERVED BY LOCAL EDUCATION AGENCY	ATTEND NEBRASKA SCHOOL FOR THE DEAF
TOTAL STUDENTS	100.0%	100.0%
One or More Additional Handicaps	34.0%	21.0%
No Additional Handicaps	66.0%	79.0%
TOTAL NUMBER OF CONDITIONS	(224)	(31)
Brain Damage or Injury	5.1%	1.2%
Epilepsy	3.9%	1.2%
Orthopedic	5.4%	1.8%
Cerebral Palsy	6.4%	5.4%
Heart Disorder	1.2%	1.8%
Other Health Impaired	2.4%	2.4%
Other Handicaps (excluding visual or hearing handicaps)	5.1	1.8%
Mental Retardation	13.2%	4.2%
Behaviorally Impaired	1.7%	1.8%
Specific Learning Disability	10.3%	5.4%

[a] This represents all students with a hearing impairment only and deaf-blind students but excludes the 10 students for whom data were not reported.

TABLE M

PERCENTAGE DISTRIBUTION OF ADDITIONAL HANDICAPPING CONDITIONS AMONG ALL CHILDREN WITH A VISUAL IMPAIRMENT BY SITE OF SERVICE, 1981-82[a]

ADDITIONAL HANDICAPS	SERVED BY LOCAL EDUCATION AGENCY	ATTEND NEBRASKA SCHOOL FOR THE VISUALLY HANDICAPPED
TOTAL STUDENTS	100.0%	100.0%
One or More Additional Handicaps	53.5%	60.0%
No Additional Handicaps	46.5%	40.0%
TOTAL NUMBER OF CONDITIONS	(297)	(31)
Brain Damage or Injury	13.4%	10.0%
Epilepsy	8.2%	10.0%
Orthopedic	14.5%	6.7%
Cerebral Palsy	15.2%	6.7%
Heart Disorder	1.9%	---
Other Health Impaired	3.0%	3.3%
Mental Retardation	33.8%	36.7%
Behaviorally Impaired	5.9%	10.0%
Specific Learning Disability	9.0%	13.3%
Other Handicaps	5.9%	6.7%

[a] This represents all students with a visual handicap only and deaf-blind students but excludes the 3 students for whom data were not reported.

TABLE N

NUMBER AND PERCENTAGE DISTRIBUTION OF AGE AT ONSET OF HEARING LOSS AMONG HEARING IMPAIRED CHILDREN IN NEBRASKA, 1981-82

Age at Onset of Hearing Loss	Hearing Impaired Only		Hearing and Visually Impaired	
	Number	Percent	Number	Percent
Total Children[a]	371	100.0%	40	100.0%
At Birth	254	68.5%	35	87.5%
Under 1 year	28	7.6%	3	7.5%
1 year	23	6.2%	--	---
2 years	25	6.7%	--	---
3 years	15	4.0%	--	---
4 years	9	2.4%	--	---
5 years	5	1.4%	--	---
6 years	3	0.8%	2	5.0%
7 years & over	9	2.4%	--	---

[a] This excludes 191 hearing impaired children and 14 hearing and visually impaired children for whom age at onset of hearing loss was not reported or was unknown.

TABLE O

NUMBER AND PERCENTAGE DISTRIBUTION OF CAUSE OF HEARING LOSS AMONG HEARING IMPAIRED CHILDREN IN NEBRASKA, 1981-82

Cause of Hearing Loss	Hearing Impaired Only		Hearing and Visually Impaired	
	Number	Percent	Number	Percent
Total Children[a]	272		22	
Causes at Birth				
Maternal Rubella	46	16.9%	6	27.3%
Trauma at Birth	11	4.0%	2	9.1%
Other Complications of Pregnancy	2	0.7%	3	13.6%
Heredity	51	18.8%	3	13.6%
Prematurity	12	4.4%	2	9.1%
Rh Incompatibility	3	1.1%	1	4.6%
Other	38	14.0%	3	13.6%
Causes after Birth				
Meningitis	38	14.0%	1	4.6%
High Fever	13	4.8%	1	4.6%
Mumps	--	---	-	---
Infections	16	5.9%	1	4.6%
Measles	3	1.1%	-	---
Otitis Media	29	10.7%	1	4.6%
Trauma after Birth	3	1.1%	-	---
Other	23	8.5%	-	---

[a] This excludes 290 hearing impaired children and 32 hearing and visually impaired children for whom a cause of hearing loss was not reported or was unknown.

TABLE P

PERCENTAGE DISTRIBUTION OF ALL CHILDREN WITH HEARING IMPAIRMENT BY RECENCY OF AUDIOLOGICAL EXAMINATION, 1981-82[a]

Year of AUDIOLOGICAL EXAM	Hearing Impaired Only Percent	Hearing and Visually Impaired Percent
ALL STUDENTS	100.0%	100.0%
1982	19.7%	12.1%
1981	42.9%	27.3%
1980	23.2%	45.5%
1979	8.5%	6.1%
1978	3.5%	3.0%
1977 or before	2.2%	6.1%

[a]This represents all students with a hearing impairment only and deaf-blind students but excludes 91 students for whom data were not reported.

TABLE Q

Number and Percent Distribution of All Children with a Hearing Impairment by Degree of Loss and Age, 1981-82[a]

AGE IN YEARS	ALL LOSSES		MILD ≤ 41dB		MODERATE 41-55dB		MODERATE SEVERE 56-70dB		SEVERE 71-90dB		PROFOUND 91dB & above	
	N	%	N	%	N	%	N	%	N	%	N	%
TOTAL ALL AGES	587	100%	177	30%	76	13%	69	12%	95	16%	170	29%
Under 3 Years	21	100%	--	--	2	10%	3	14%	6	29%	10	48%
3 to 5	65	100%	11	17%	9	14%	10	15%	16	25%	19	29%
6 to 9	118	100%	47	40%	18	15%	14	12%	11	9%	28	24%
10 to 13	161	100%	66	41%	20	12%	13	8%	25	16%	37	23%
14 to 17	180	100%	41	23%	24	13%	27	15%	29	16%	59	33%
18 and over	42	100%	12	29%	3	7%	2	5%	8	19%	17	40%

[a]This represents all students with a hearing impairment only and student with both visual and hearing impairments but excludes 29 students for whom age and severity of loss were not reported.

TABLE R

NUMBER AND PERCENTAGE DISTRIBUTION OF AGE AT ONSET OF VISUAL HANDICAP FOR VISUALLY HANDICAPPED CHILDREN IN NEBRASKA, 1981-82

Age at Onset of Vision Loss	Visually Handicapped Only		Hearing and Visually Impaired	
	Number	Percent	Number	Percent
Total Children[a]	188	100.0%	37	100.0%
At Birth	170	90.0%	32	86.0%
Under 1 year	4	2.0%	4	11.0%
1 year	--	---	--	---
2 years	1	1.1%	--	---
3 years	2	1.1%	--	---
4 years	4	2.0%	--	---
5 years	--	---	--	---
6 years	1	1.0%	--	---
7 years & over	6	3.0%	1	3.0%

[a] Excludes 66 visually handicapped only and 17 students with both visual and hearing handicaps for whom data were not reported.

TABLE S

NUMBER AND PERCENTAGE DISTRIBUTION OF CAUSES OF VISUAL HANDICAPS AMONG VISUALLY HANDICAPPED CHILDREN, 1981-82[a]

Cause of Visual Handicap	All Visually Handicapped Children	
	Number	Percentage
TOTAL CHILDREN	268	100%
Cataracts	29	11%
Glaucoma	9	3%
Diabetes	3	1%
Maternal Rubella	7	3%
Retrolental Fibroplasia	22	8%
Optic Nerve Atrophy	54	20%
Albinism	29	11%
Nystagmus	63	24%
Retinitis Pigmentosa	10	4%
Macular Degeneration	7	3%
Retinal Degeneration	9	3%
Amblyopia	26	10%
Other Heredity	45	17%
Injury or Accident	9	3%
Other	86	32%

[a] This represents all students with a visual handicap but excludes 40 students for whom data were not reported.

TABLE T

PERCENTAGE DISTRIBUTION OF ALL CHILDREN WITH A VISUAL IMPAIRMENT BY RECENCY OF VISUAL EXAMINATION, 1981-82[a]

YEAR OF EXAMINATION	VISUALLY HANDICAPPED ONLY	HEARING & VISUALLY HANDICAPPED
Total	100%	100%
1982	3%	3%
1981	26%	26%
1980	45%	36%
1979	6%	8%
1978	5%	10%
1977 or before	14%	18%

[a] Excluded are 32 students with a visual handicap only and 15 students with both hearing and visual handicaps for whom data were not reported.

TABLE U

DISTRIBUTION OF DISTANCE VISION RESULTS FOR CHILDREN WITH VISUAL HANDICAP ONLY, 1981-82

LEFT EYE / RIGHT EYE	TOTAL STUDENTS	Near Normal Vision 20/10-20/60	Moderate Impairment 20/70-20/160	Severe Impairment 20/200-20/400	Profound Impairment 20/500-20/1000	Data Not Reported
TOTAL STUDENTS	254	32	26	36	49	111
Near Normal Vision 20/10-20/60	39	19	5	2	9	4
Moderate Impairment 20/70-20/160	28	5	13	4	4	2
Severe Impairment 20/200-20/400	39	1	6	29	1	2
Profound Impairment 20/500-20/1000	44	5	2	1	34	2
Data not reported	104	2	--	--	1	101

TABLE V

DISTRIBUTION OF DISTANCE VISION RESULTS FOR CHILDREN WITH BOTH HEARING AND VISUAL HANDICAPS, 1981-82

LEFT EYE / RIGHT EYE	TOTAL STUDENTS	Near Normal Vision 20/10-20/60	Moderate Impairment 20/70-20/160	Severe Impairment 20/200-20/400	Profound Impairment 20/500-20/1000	Data Not Reported
TOTAL STUDENTS	54	7	2	3	7	35
Near Normal Vision 20/10-20/60	8	6	--	1	1	--
Moderate Impairment 20/70-20/160	3	1	1	--	1	--
Severe Impairment 20/200-20/400	2	--	1	1	--	--
Profound Impairment 20/500-20/1000	5	--	--	--	5	--
Data not reported	36	--	--	1	--	35

TABLE W

NUMBER AND PERCENTAGE DISTRIBUTION OF FIELD OF VISION RESULTS FOR VISUALLY HANDICAPPED CHILDREN, 1981-82[a]

FIELD OF VISION	VISUALLY HANDICAPPED ONLY		HEARING & VISUALLY HANDICAPPED	
	Number	Percent	Number	Percent
Total known Information	88	100%	15	100%
Normal both eyes	24	27%	3	20%
Restricted both eyes	49	56%	9	60%
One eye restricted, other eye normal	9	10%	1	7%
One eye restricted, other eye unknown status	4	5%	1	7%
One eye normal, other eye unknown status	2	2%	1	7%

[a] Excluded are 166 students with only visual handicaps and 39 students who have both visual and hearing handicaps for whom data were not reported.

TABLE X

PERCENTAGE DISTRIBUTION OF LOW VISION EXAMINATIONS FOR VISUALLY HANDICAPPED CHILDREN, 1981-82[a]

LOW-VISION EXAMINATION	VISUALLY HANDICAPPED ONLY	HEARING & VISUALLY HANDICAPPED
TOTAL	100.0%	100.0%
Not Tested	60.2%	54.5%
Tested	34.3%	45.5%
TOTAL TESTED	100.0%	100.0%
Aids Prescribed	40.2%	30.0%
Not Prescribed	51.7%	70.0%
Information Not Reported	8.0%	--

[a] Excludes 30 students who have only visual handicaps and 10 students who are deaf-blind for whom data were not reported.

TABLE Y

NUMBER AND PERCENTAGE DISTRIBUTION OF READING MODES OF VISUALLY HANDICAPPED CHILDREN, 1981-82

READING MODES	VISUALLY HANDICAPPED ONLY		HEARING & VISUALLY HANDICAPPED	
	Number	Percent	Number	Percent
TOTAL CHILDREN[a]	182		23	
Braille	24	14%	1	4%
Large Print	66	37%	8	35%
Recorded Materials	44	25%	3	13%
Regular	115	65%	16	70%
Other	11	6%	2	4%

[a] Excludes 8 children for whom this item was left blank and 95 who were non-readers.